

Co-Planar Electrode Configuration

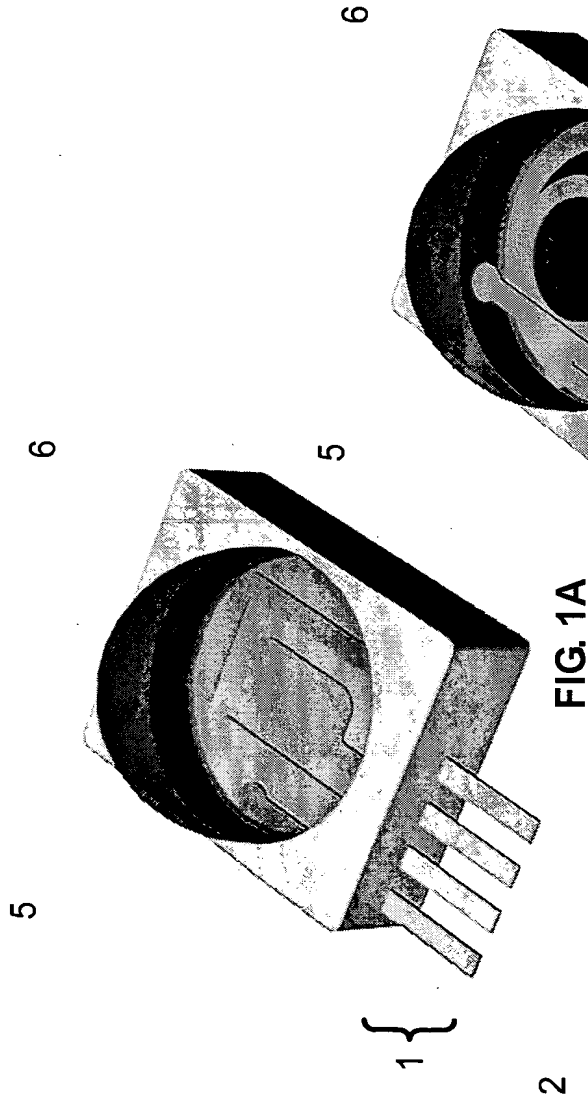
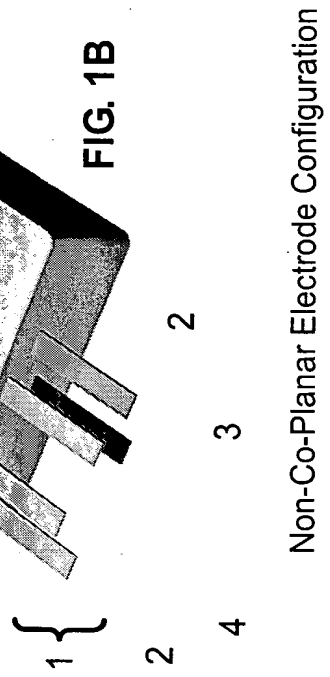


FIG. 1B



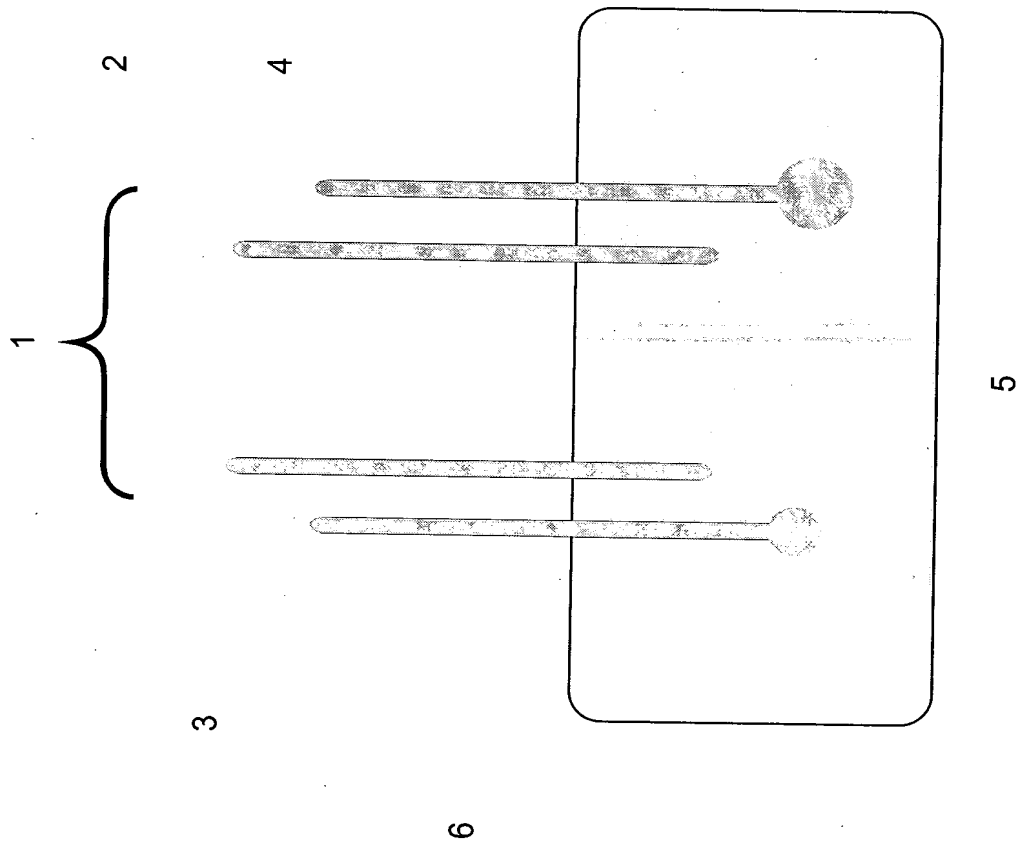
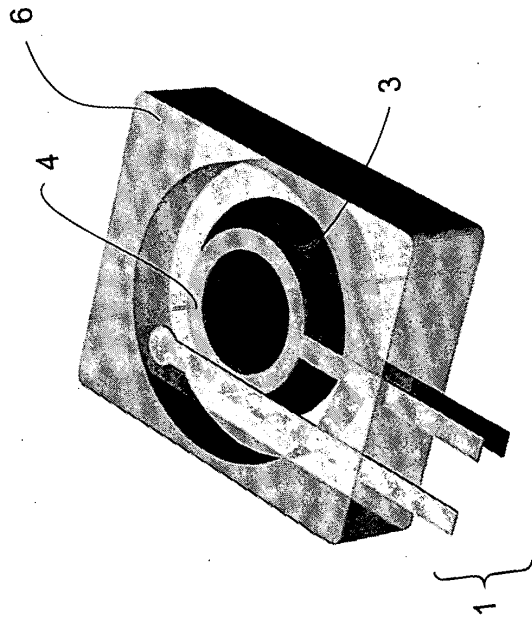


FIG. 2



2 FIG. 3

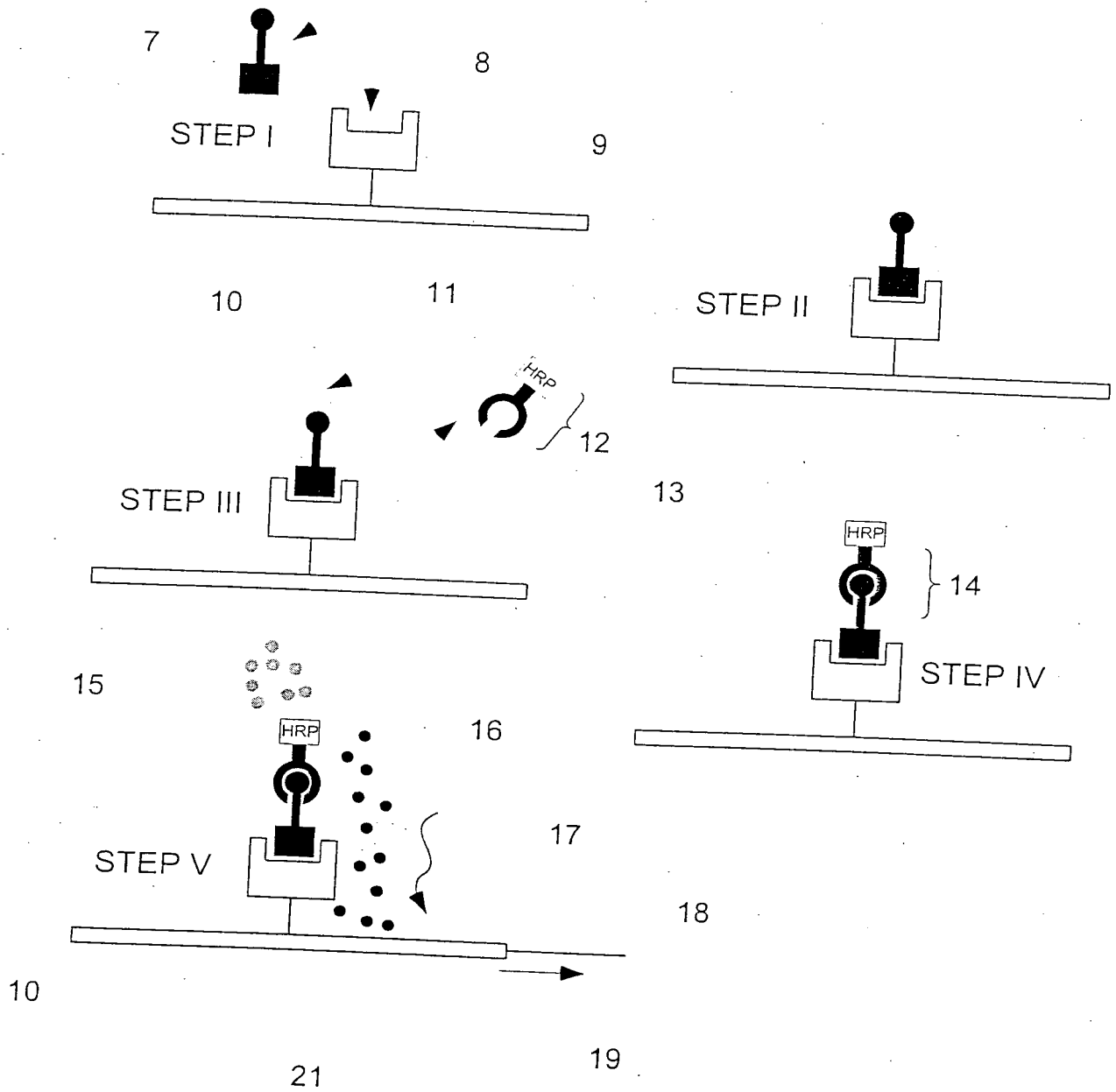


FIG. 4

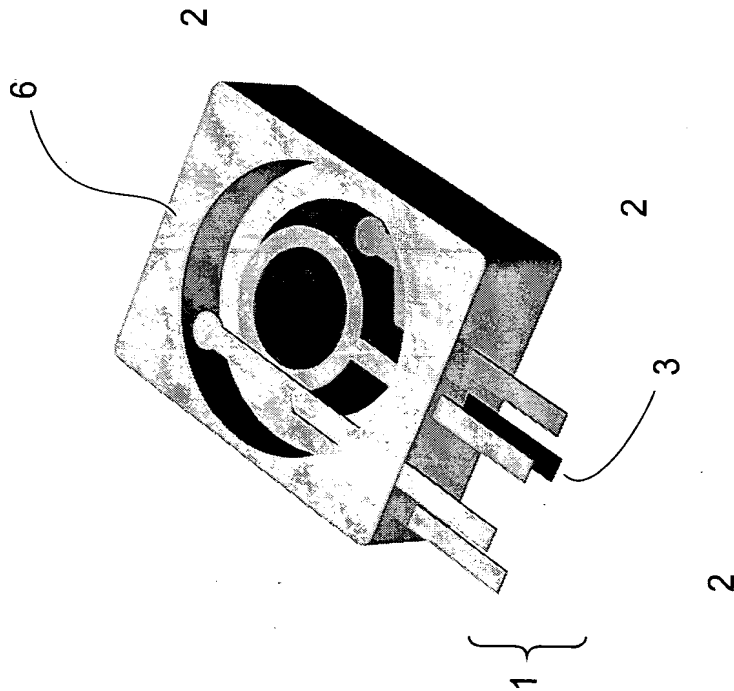
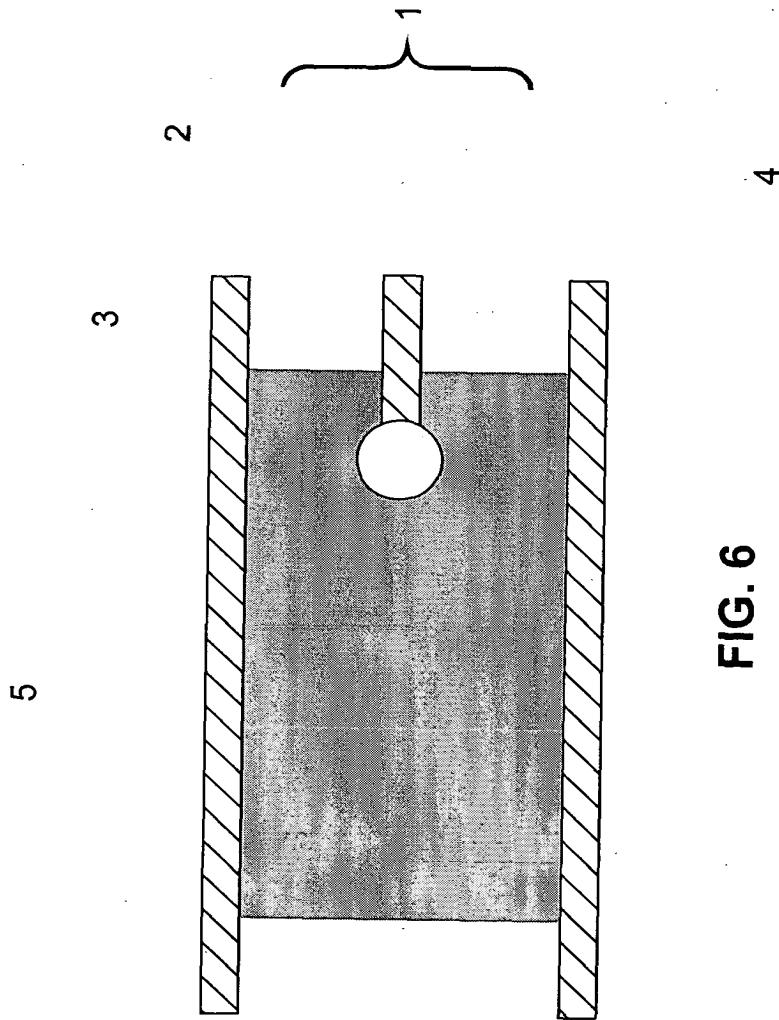
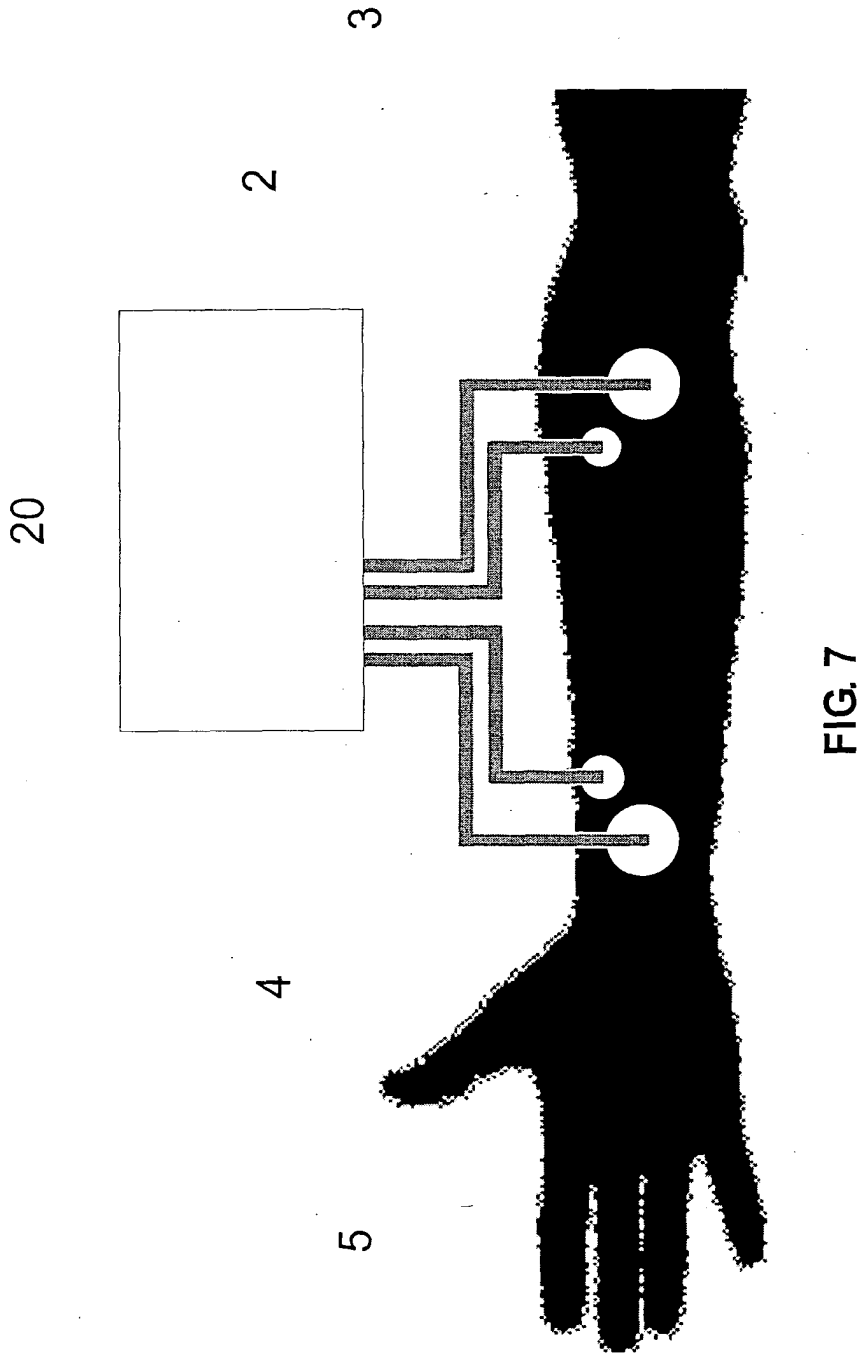


FIG. 5





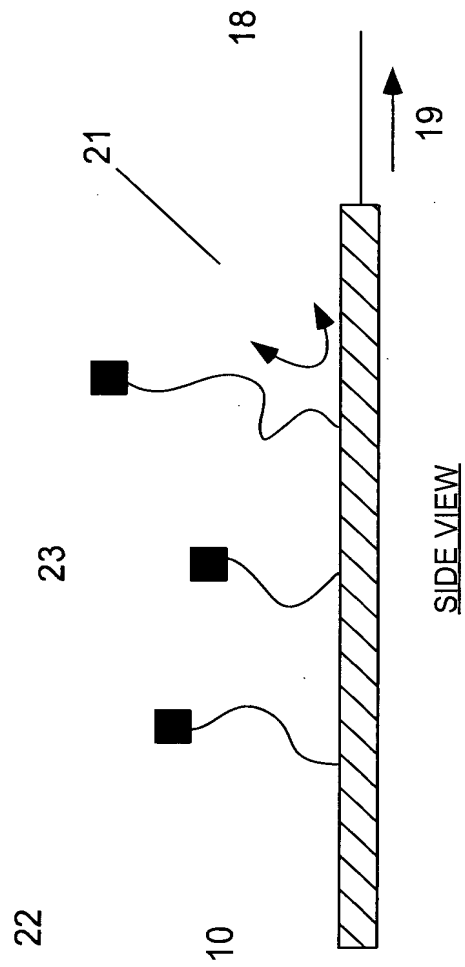


FIG. 8



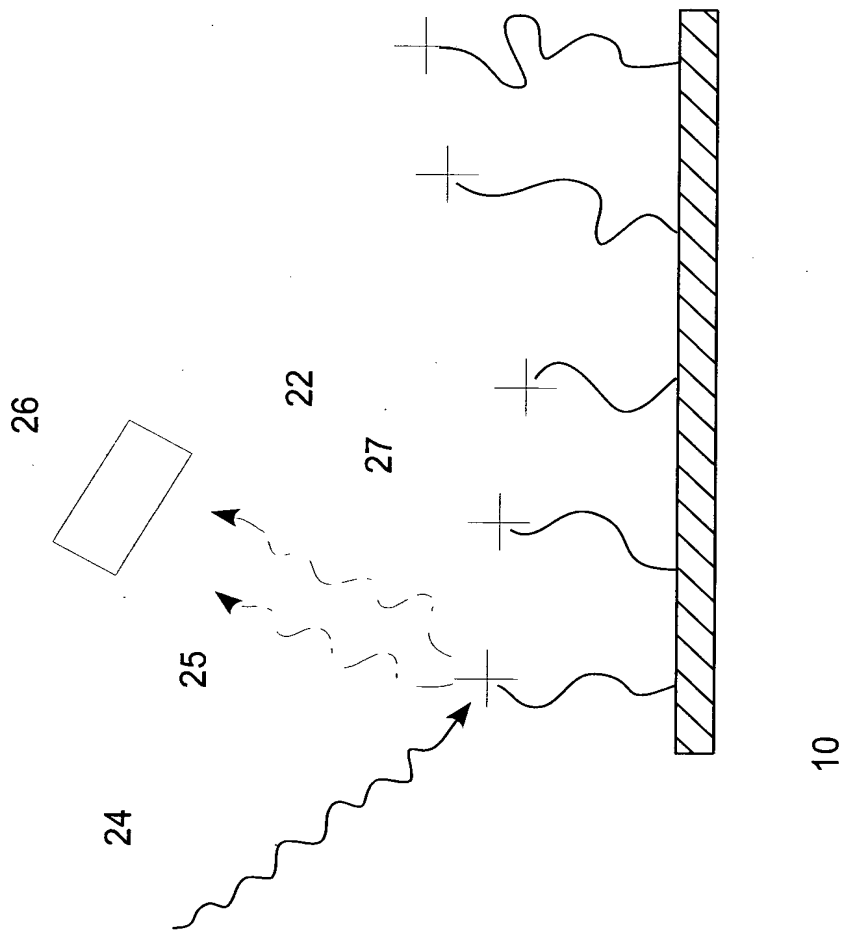
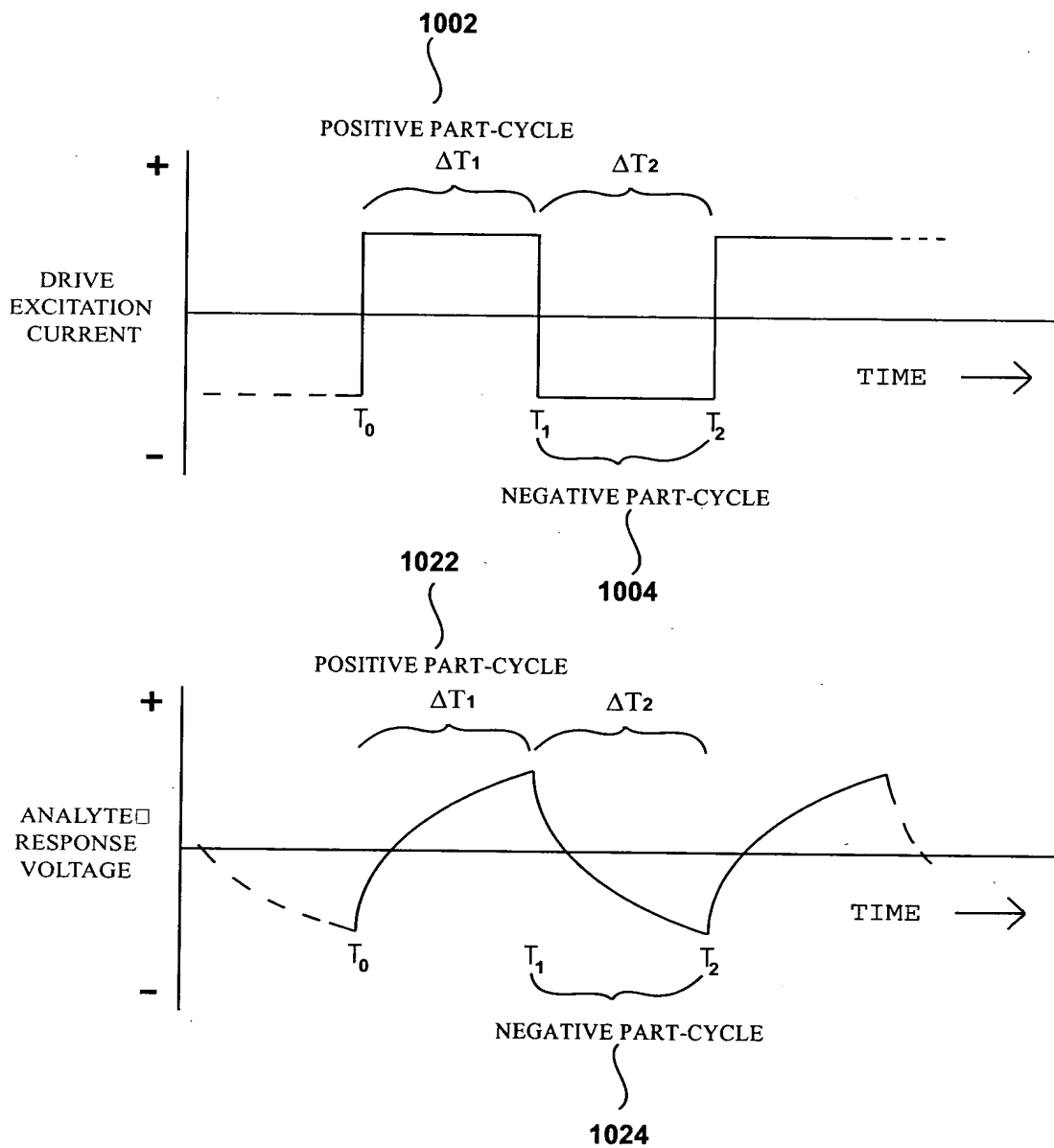
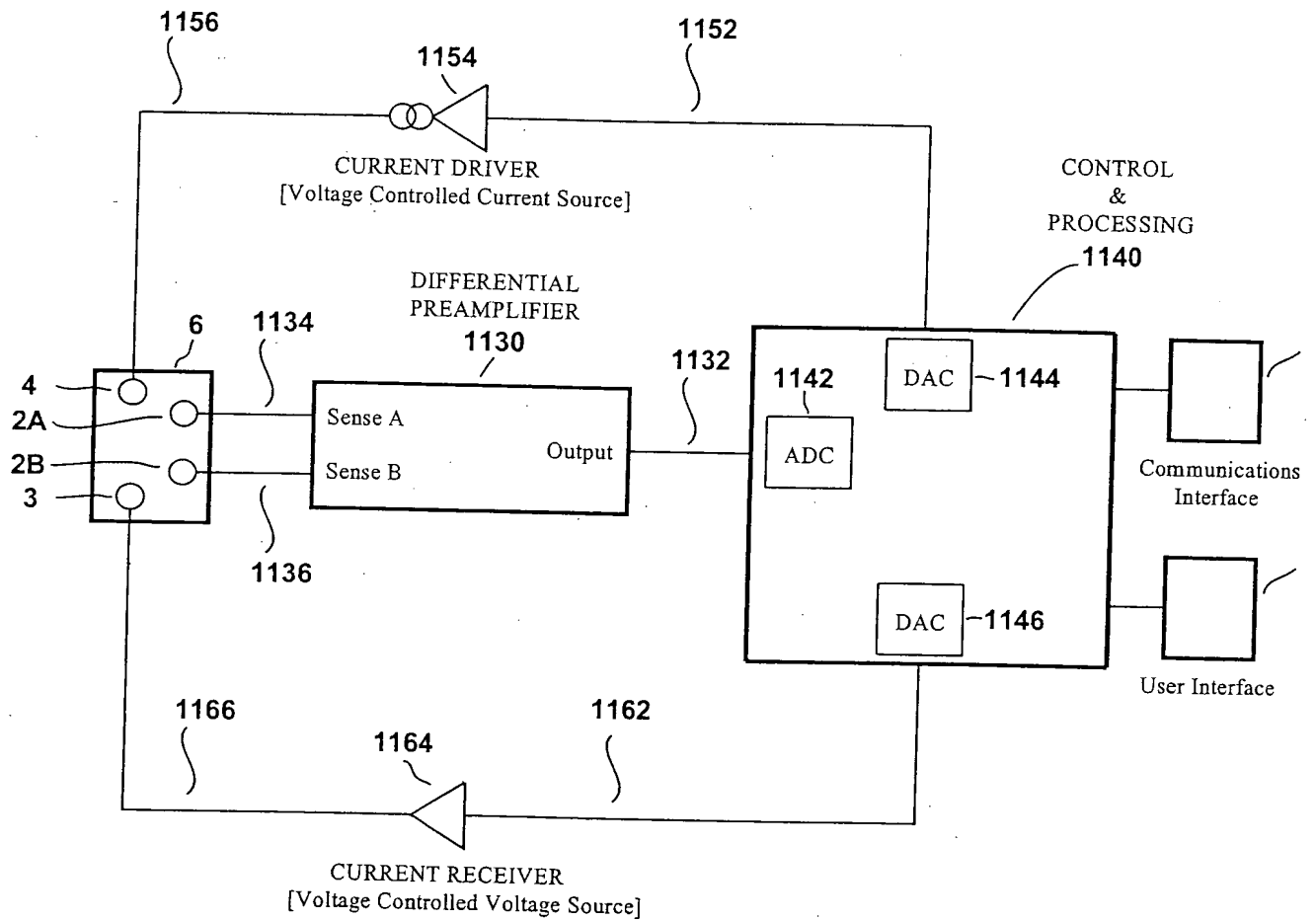


FIG. 9



**FIGURE 10**  
Excitation and Response Waveforms



**FIGURE 11**  
Galvanodynamic Test System

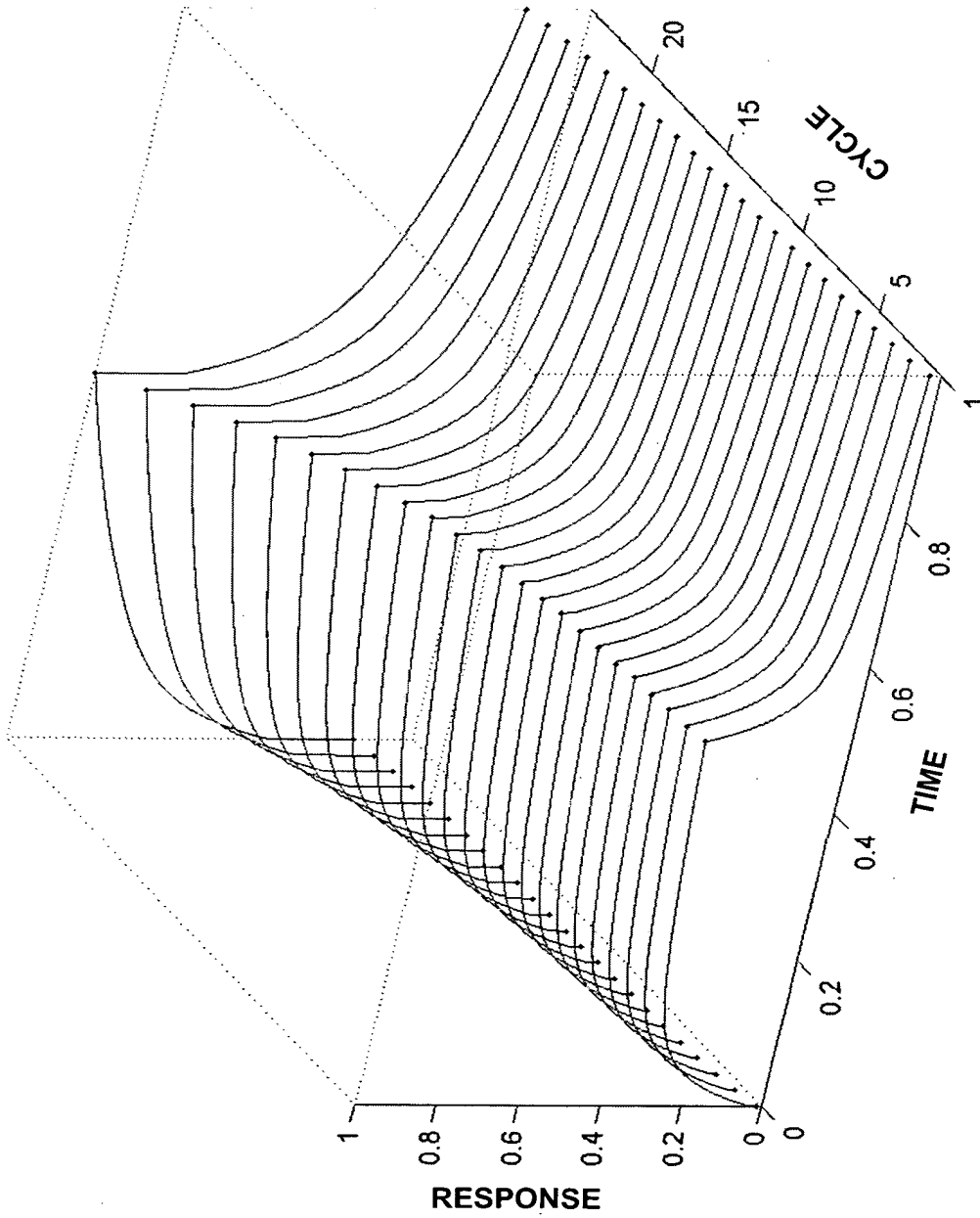


FIG. 12

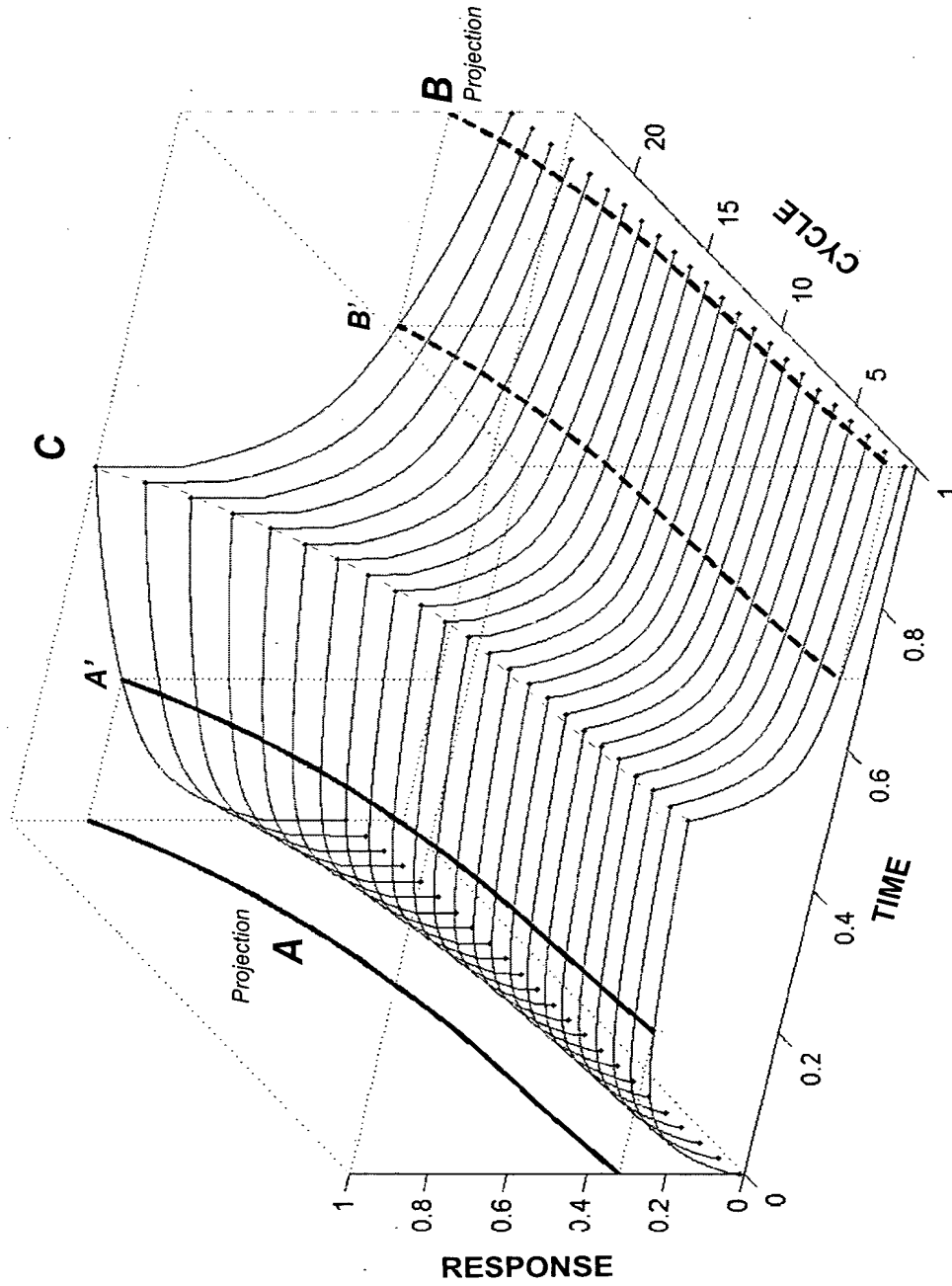


FIG. 13

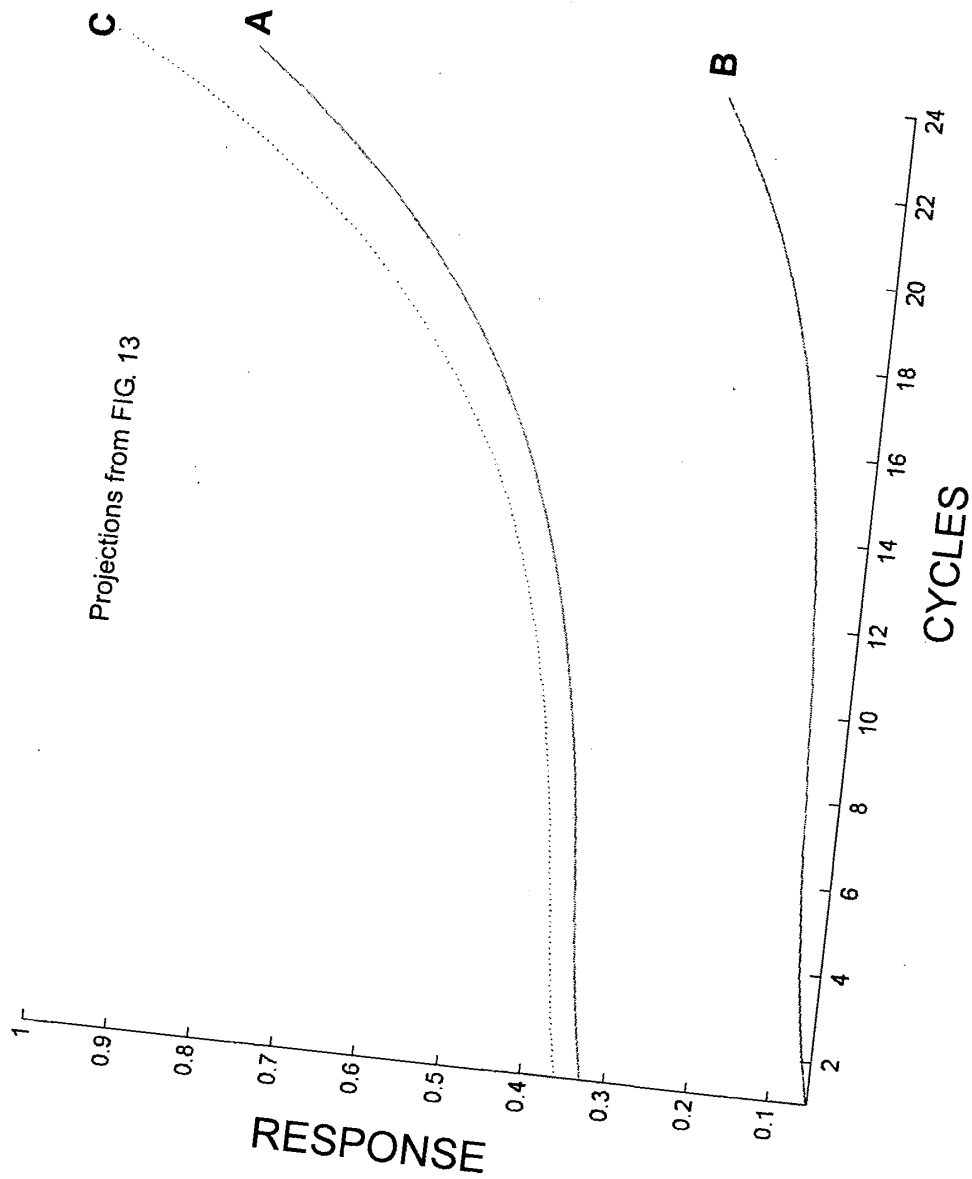
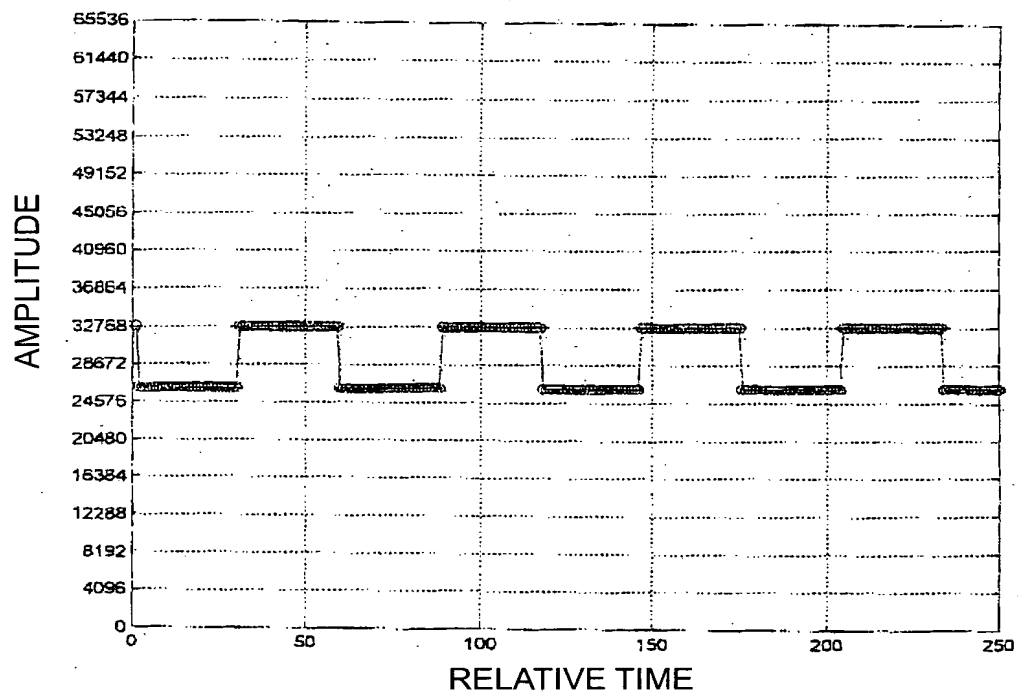
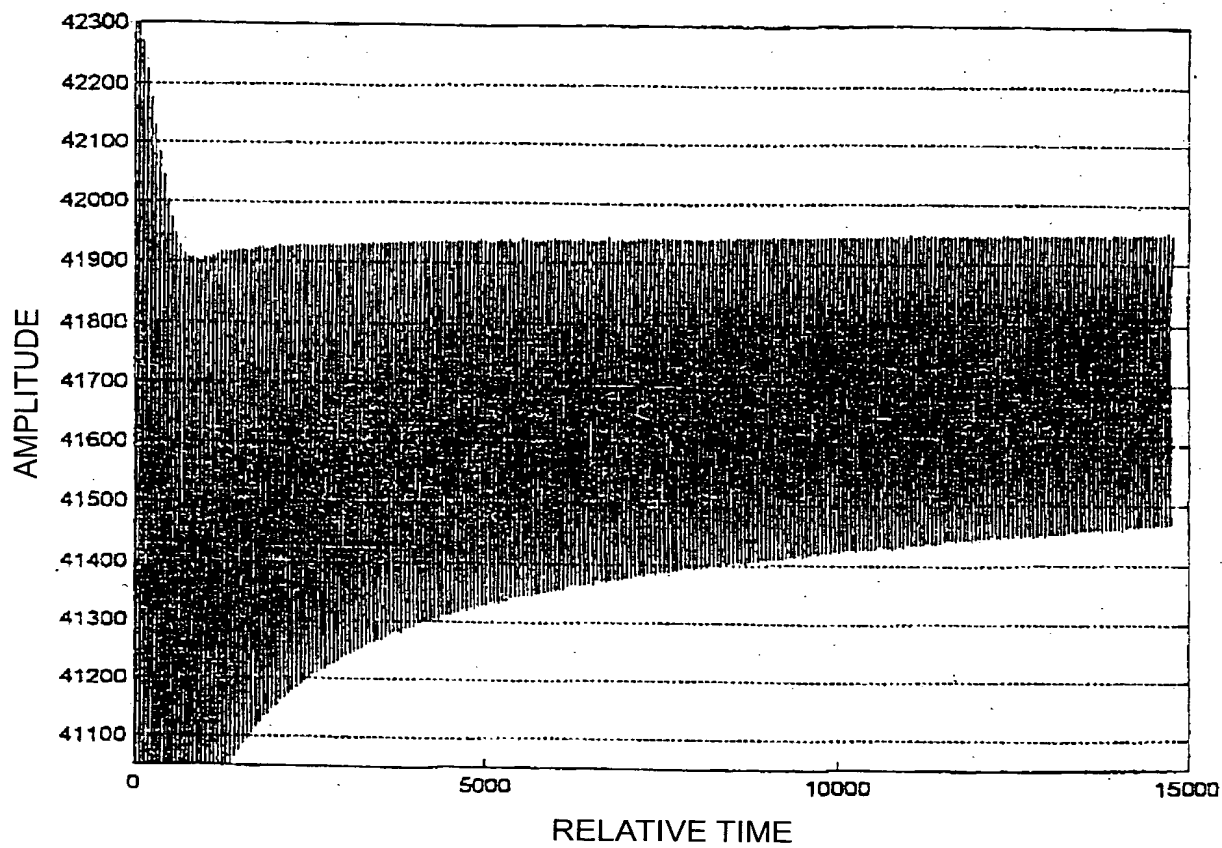


FIG. 14

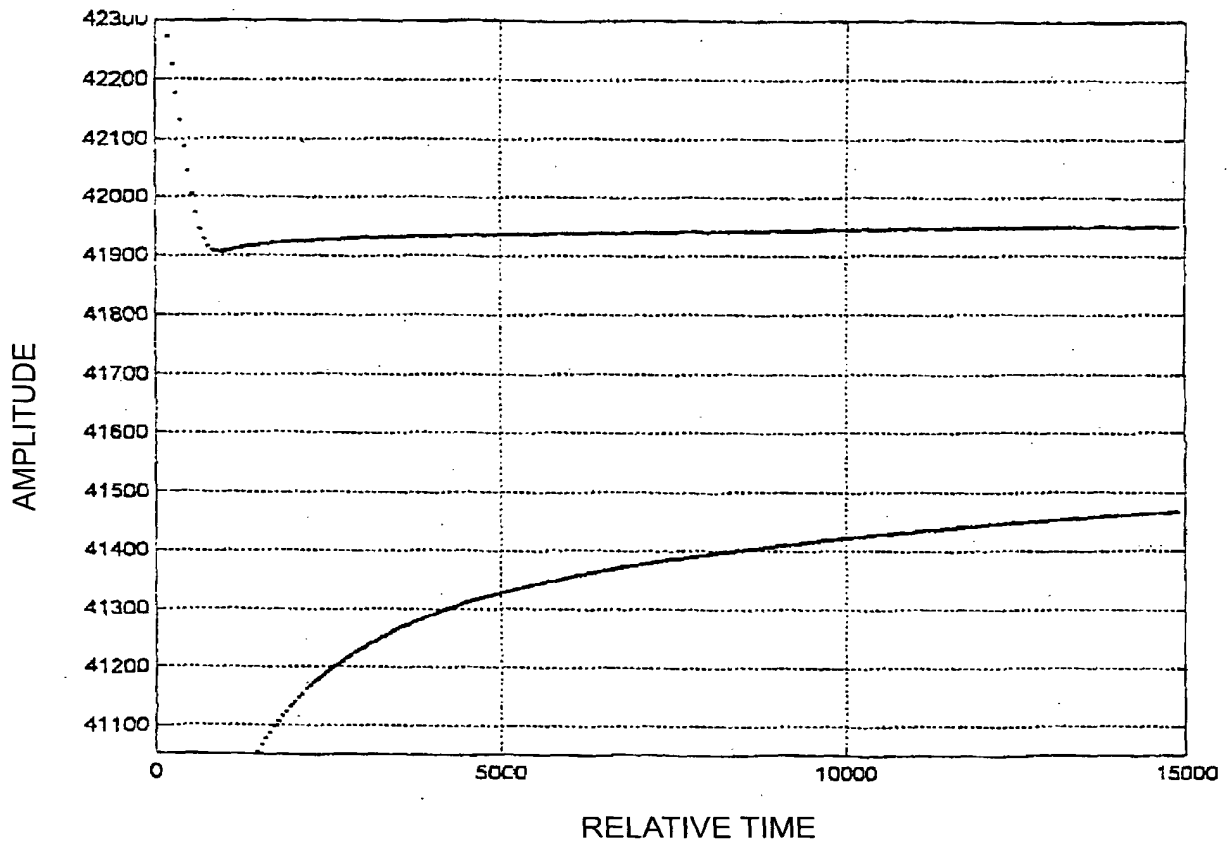


**FIG. 15**

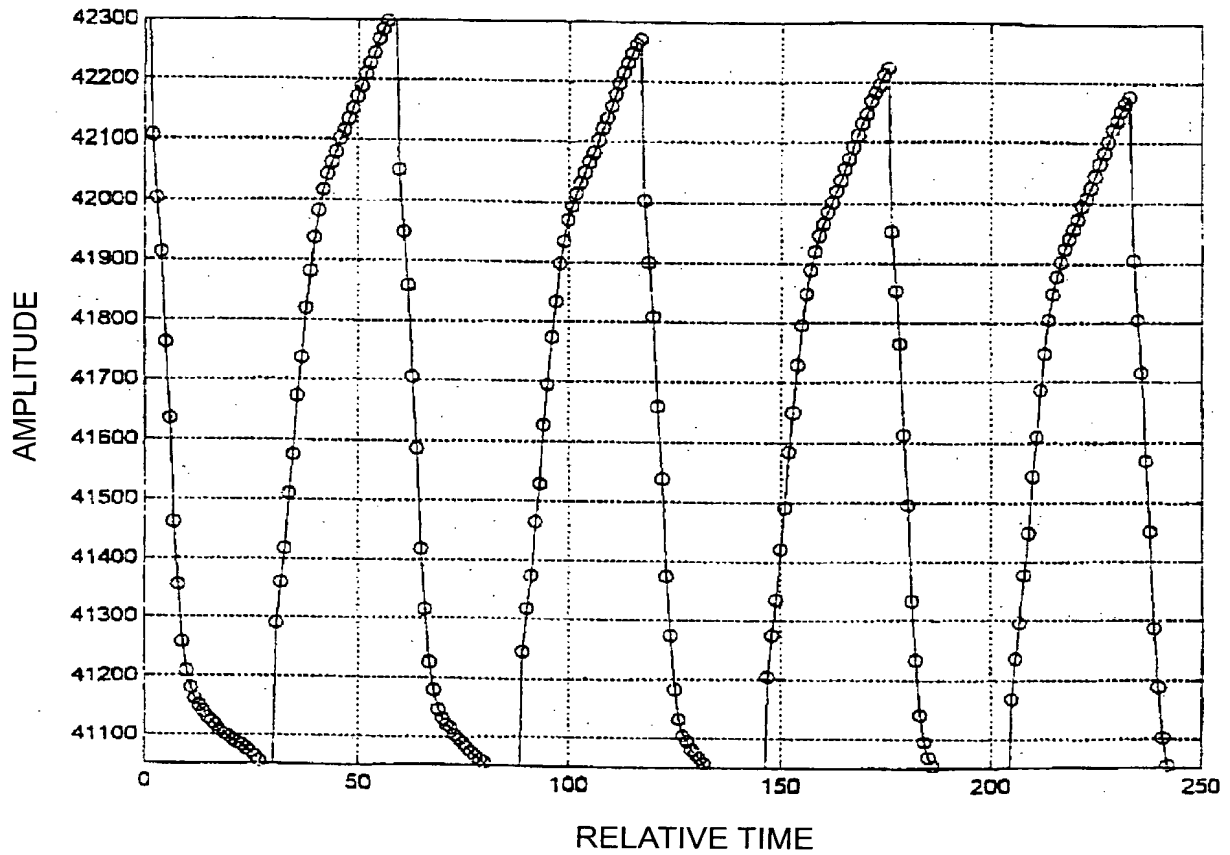


**FIG. 16A**

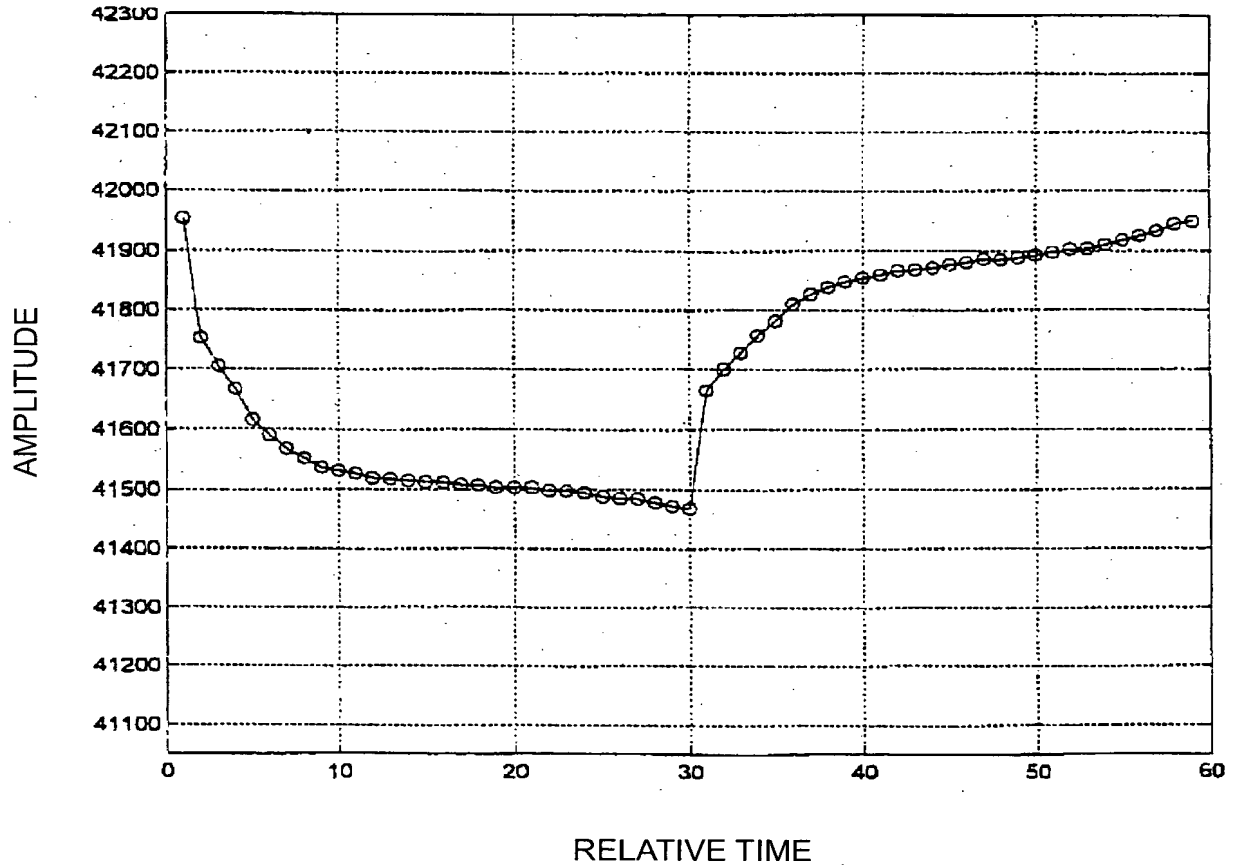




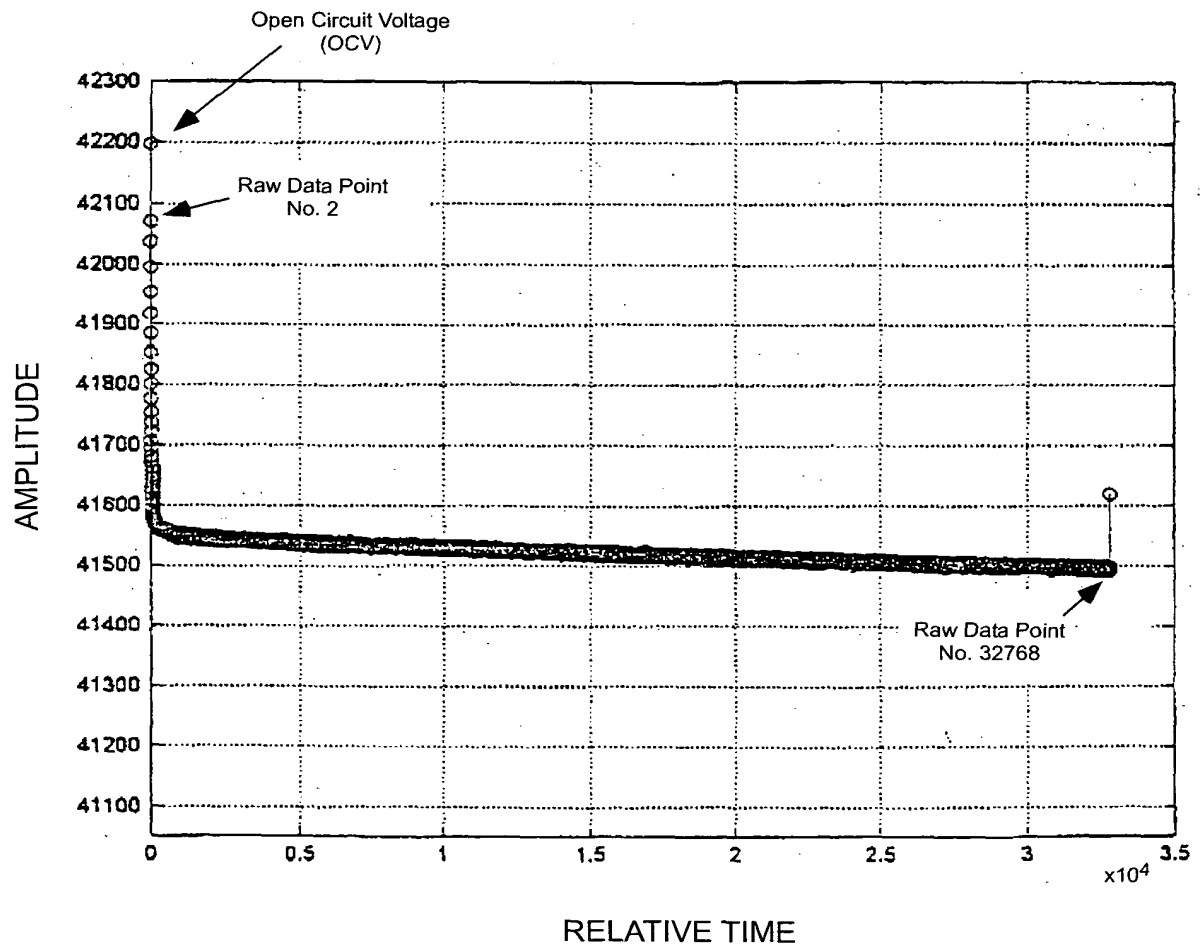
**FIG. 16B**



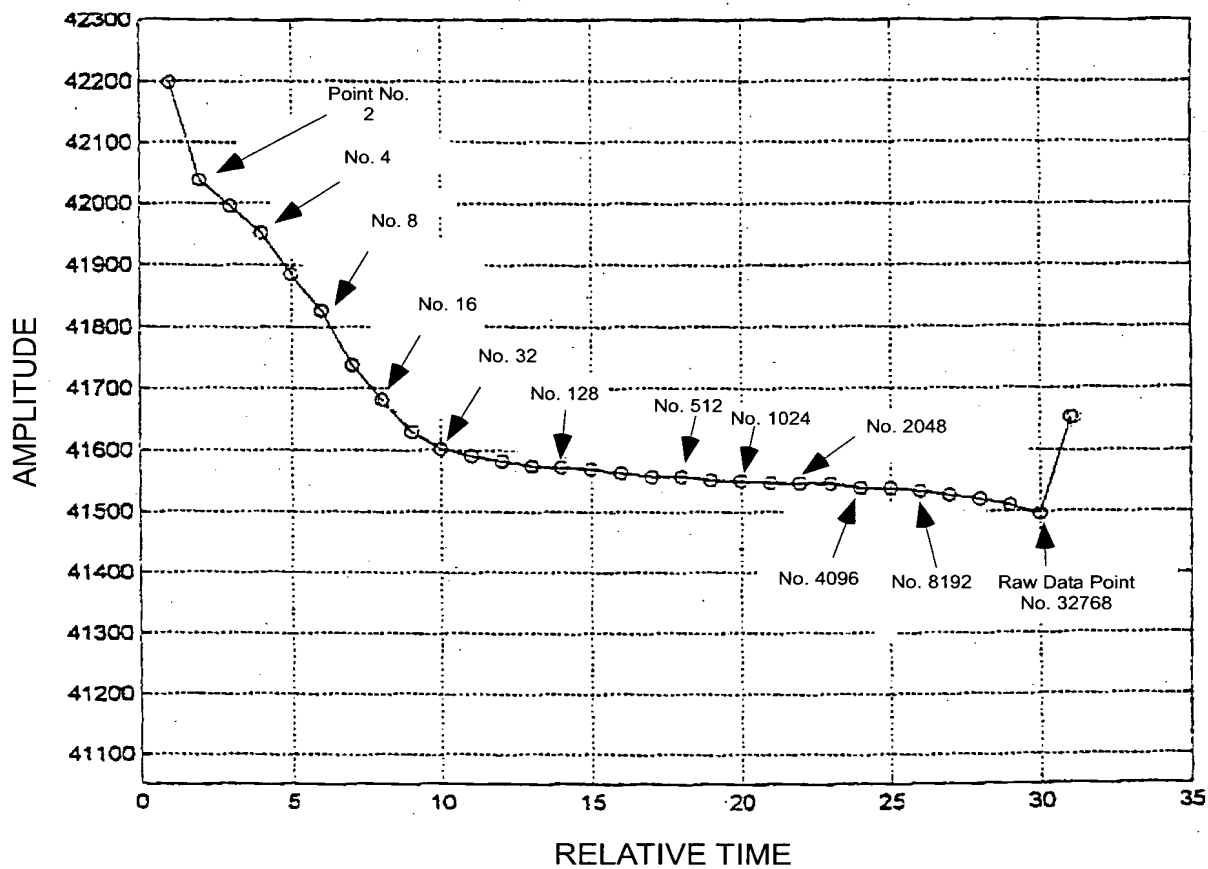
**FIG. 16C**



**FIG. 16D**



**FIG. 17A**



Exponentially Decimated Data Point  
First Discharge Pulse (32,768 Raw Data Points)

**FIG. 17B**

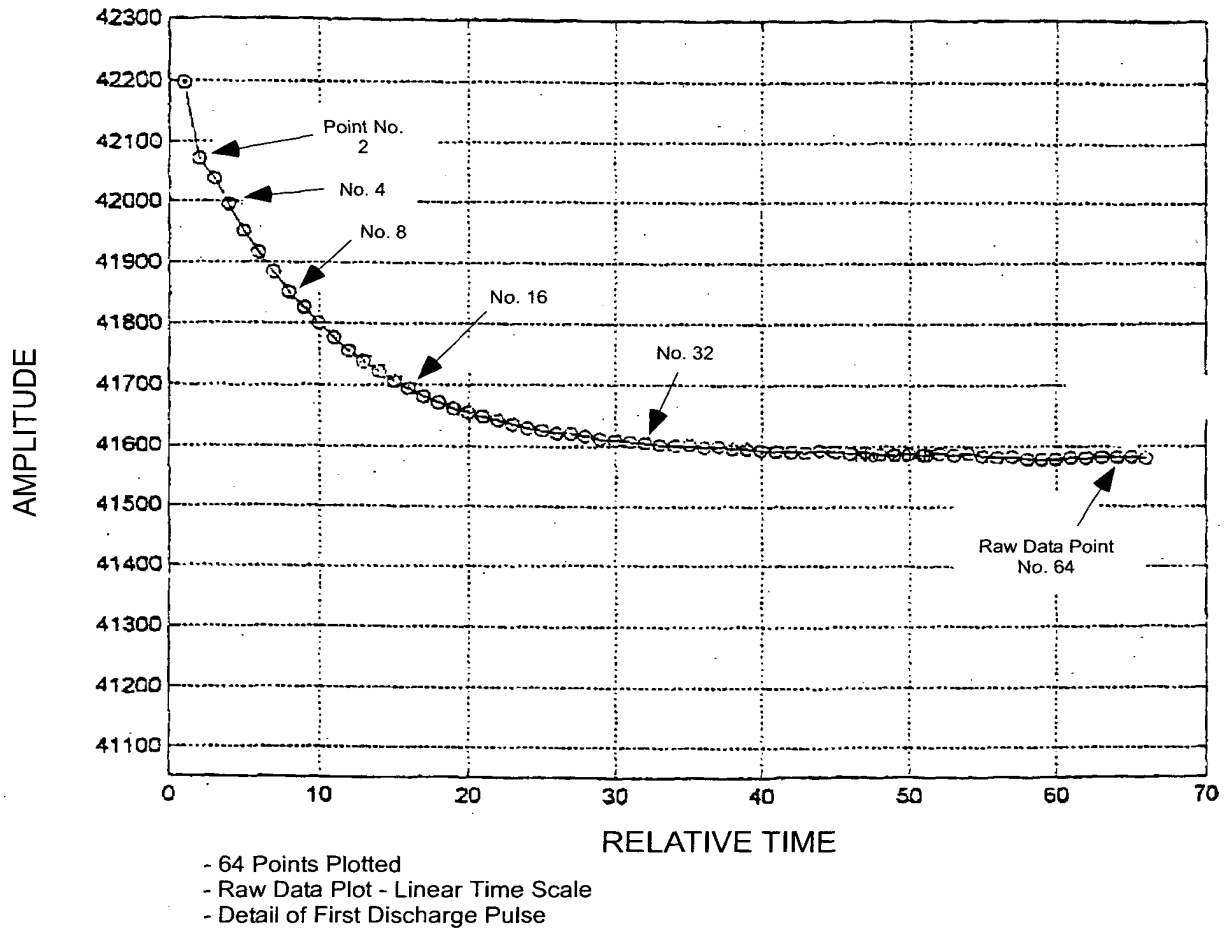
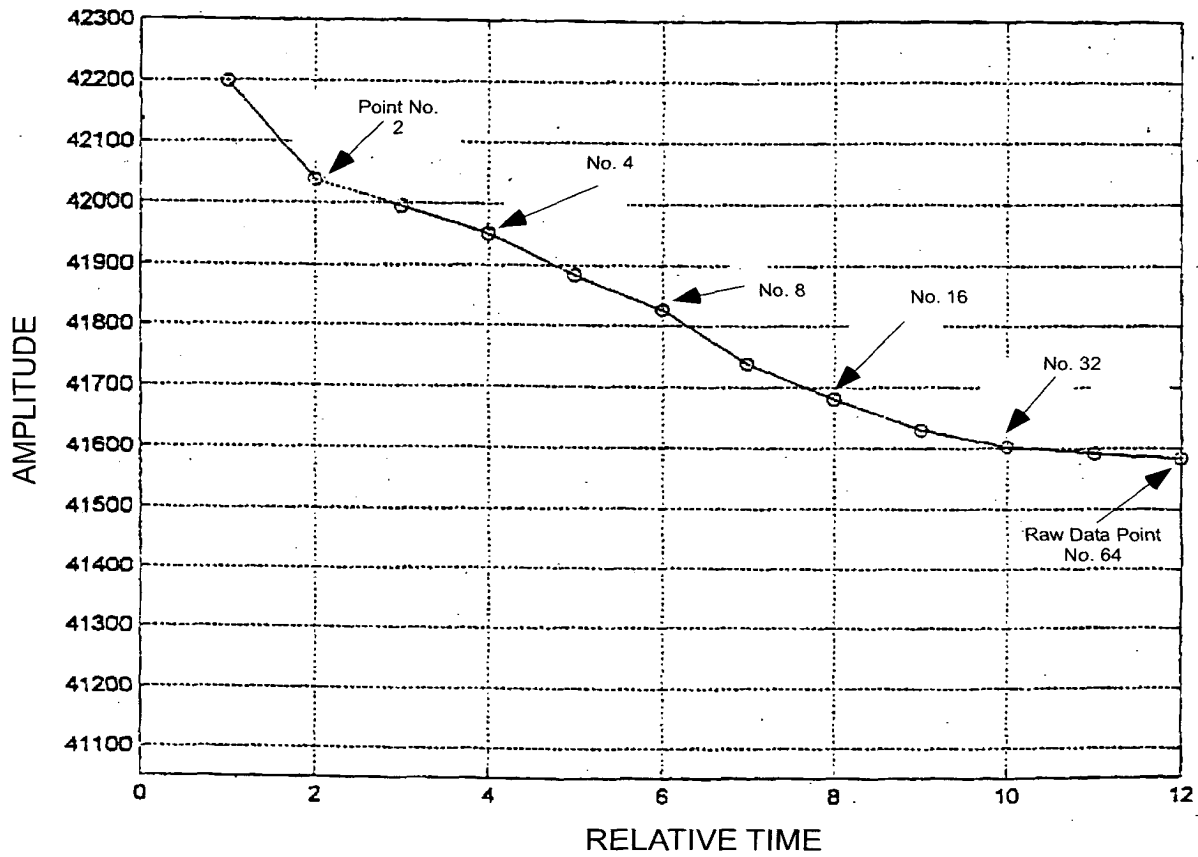
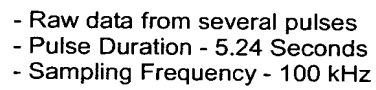


FIG. 17C



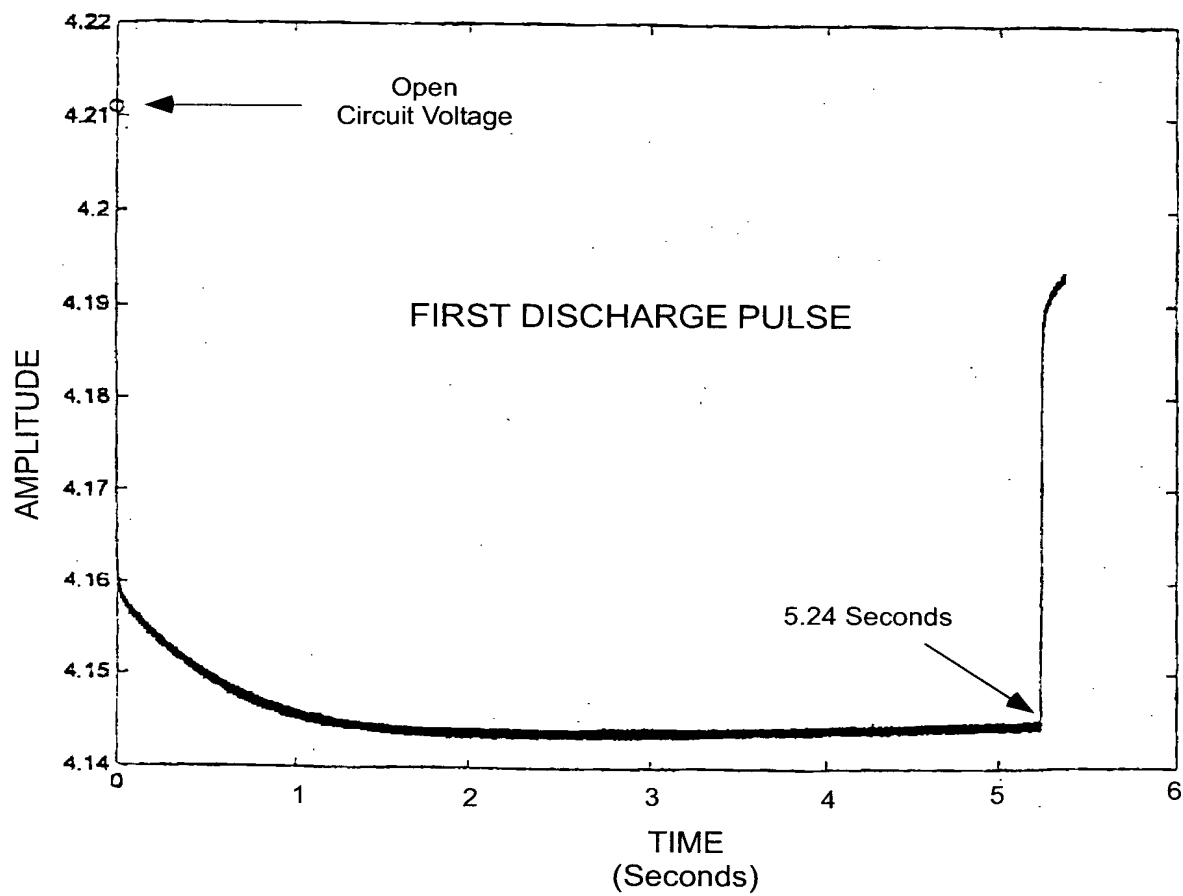
- Exponentially Decimated Data Plot
- Last Point Corresponds to Raw Date Point No. 64

**FIG. 17D**

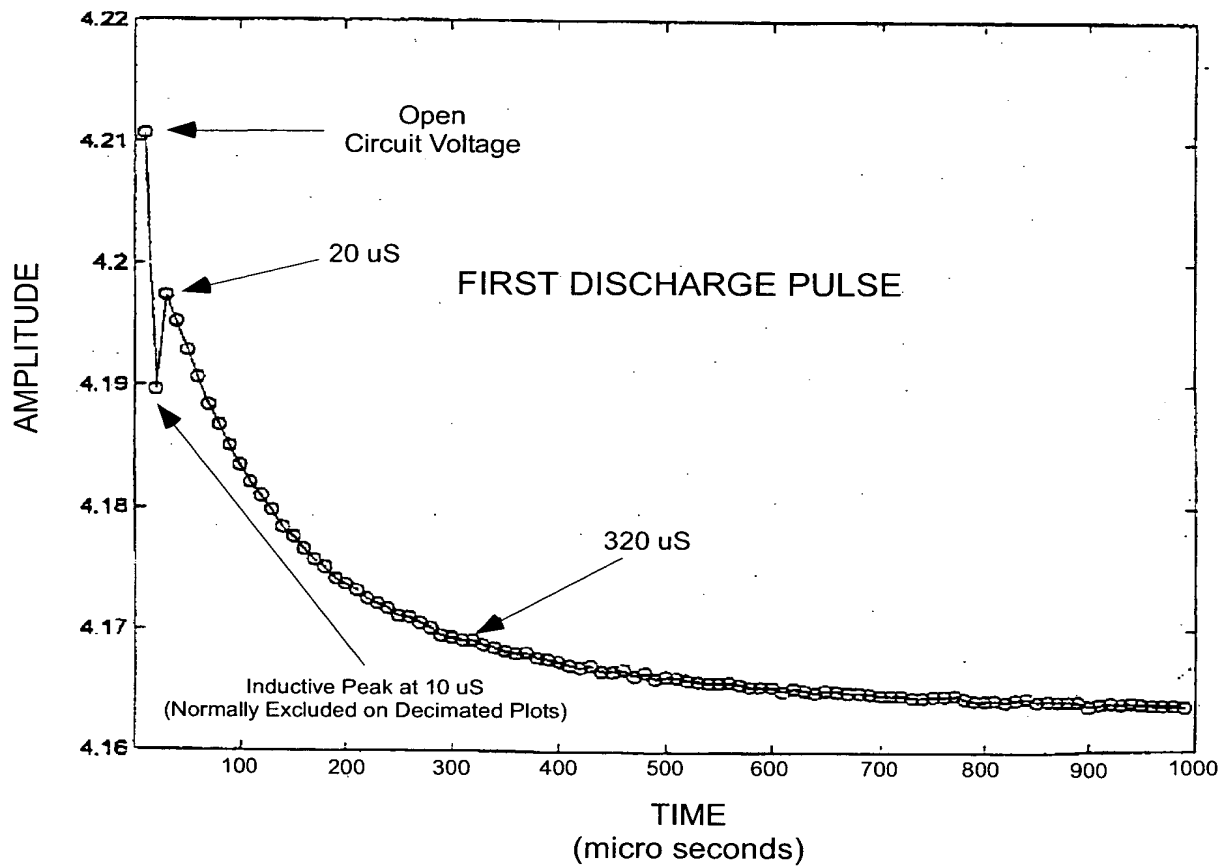


**FIG. 18A**

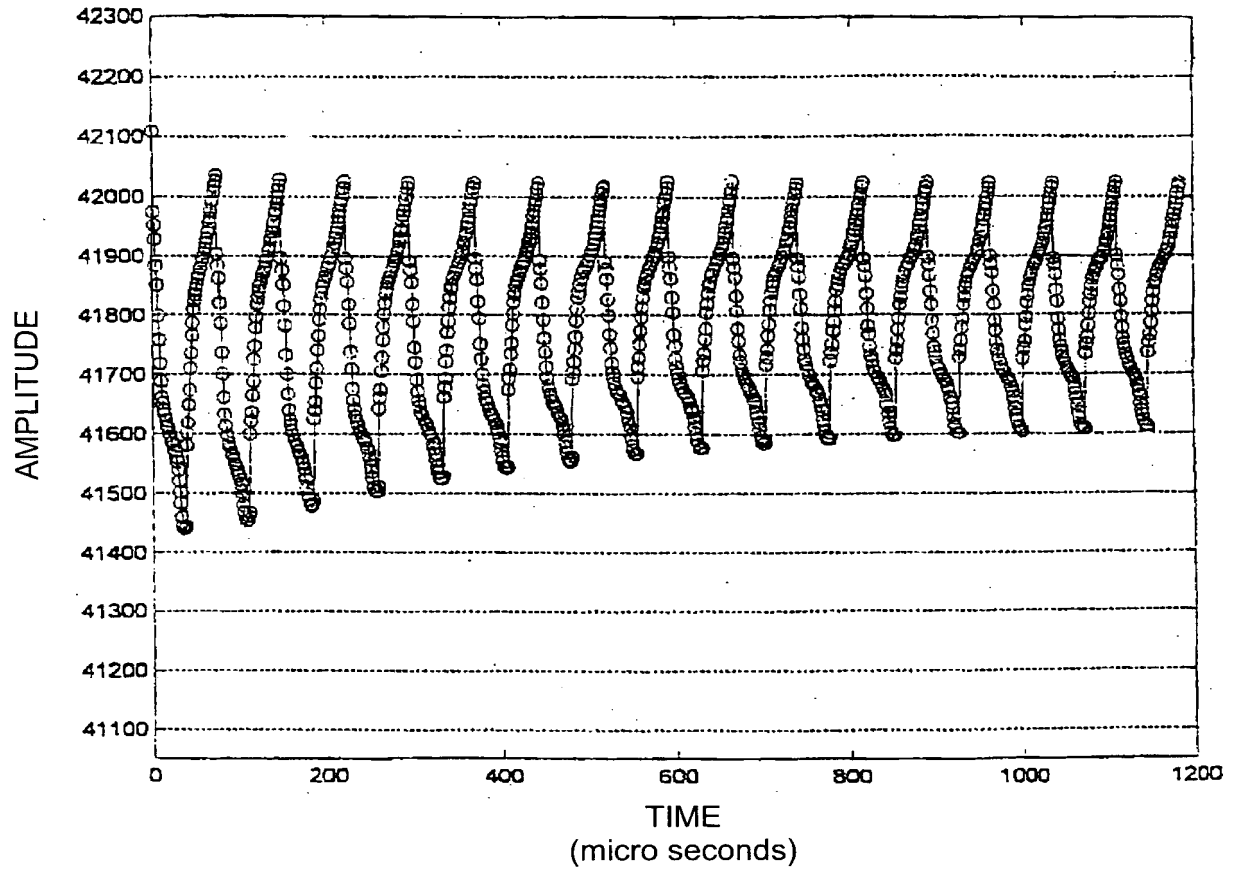




**FIG. 18B**



**FIG. 18C**



- Exponentially Decimated Data - 16 Full Cycles
- Sampling Frequency: 100 kHz
- Pulse Duration - 5.24 Seconds

**FIG. 18D**

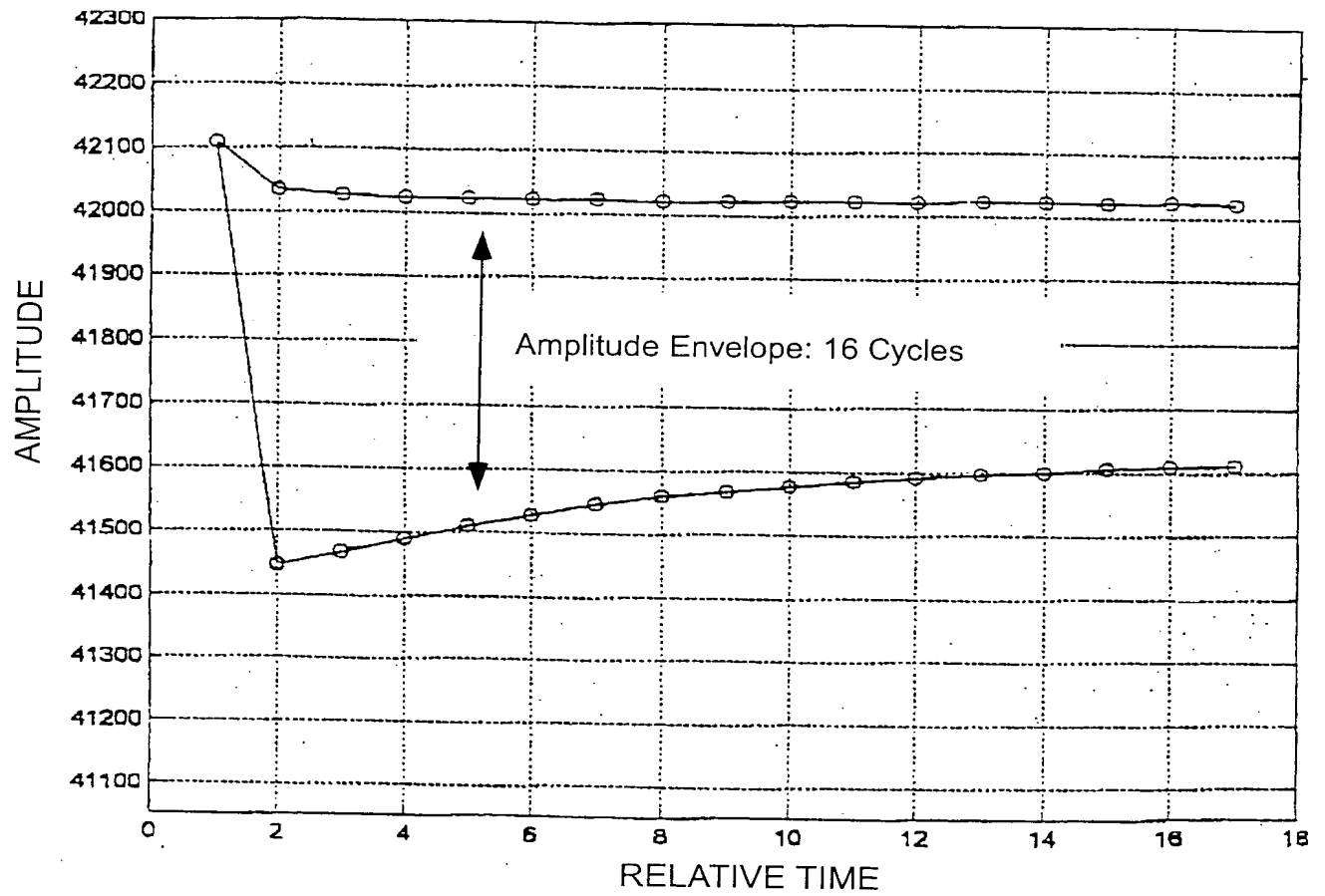
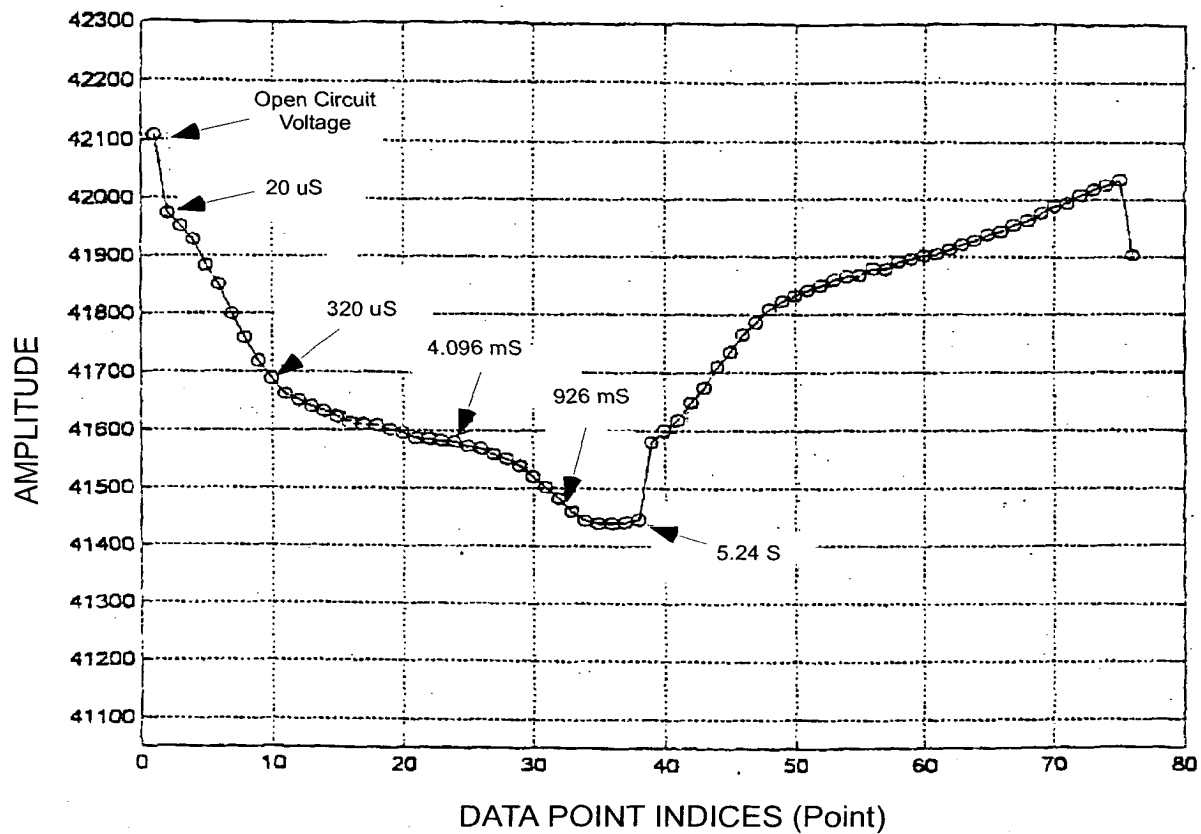
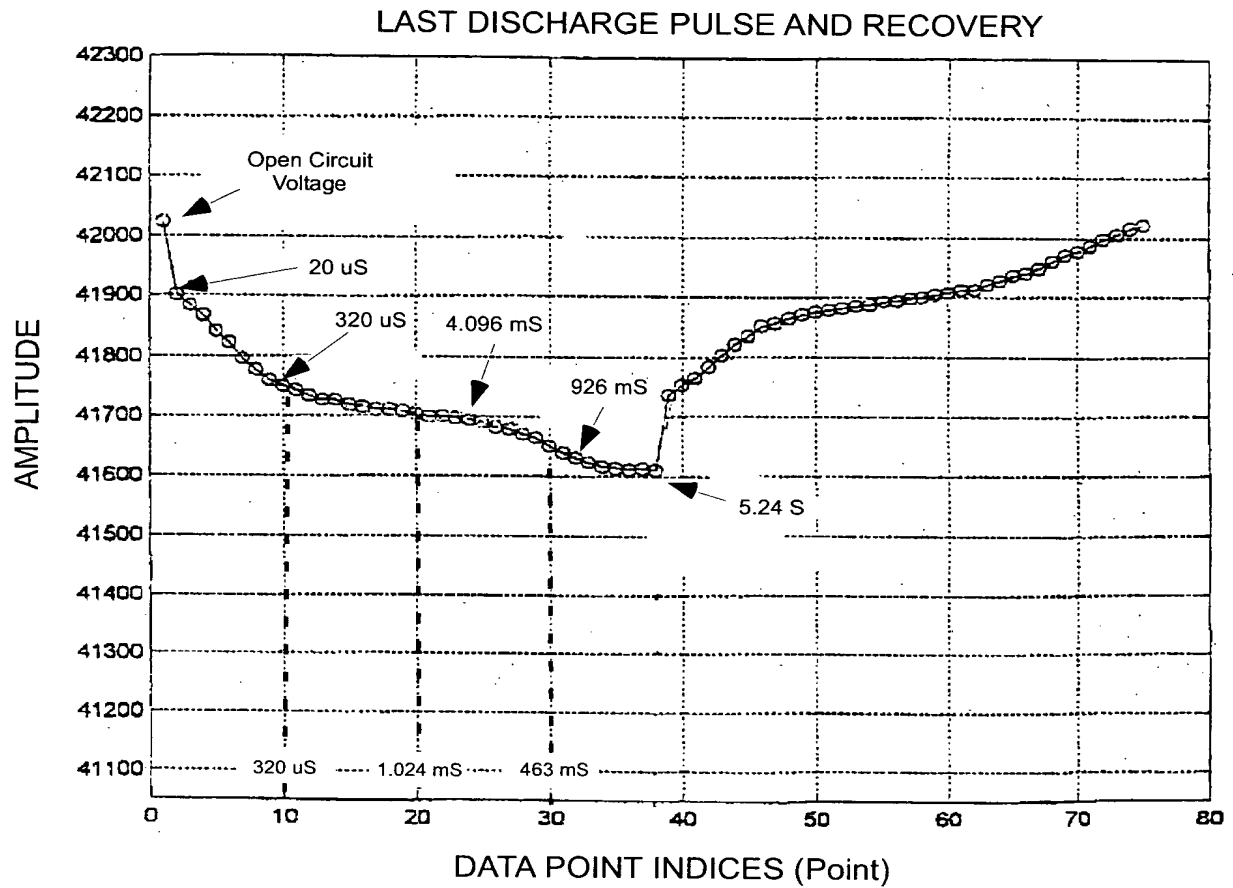


FIG. 18E

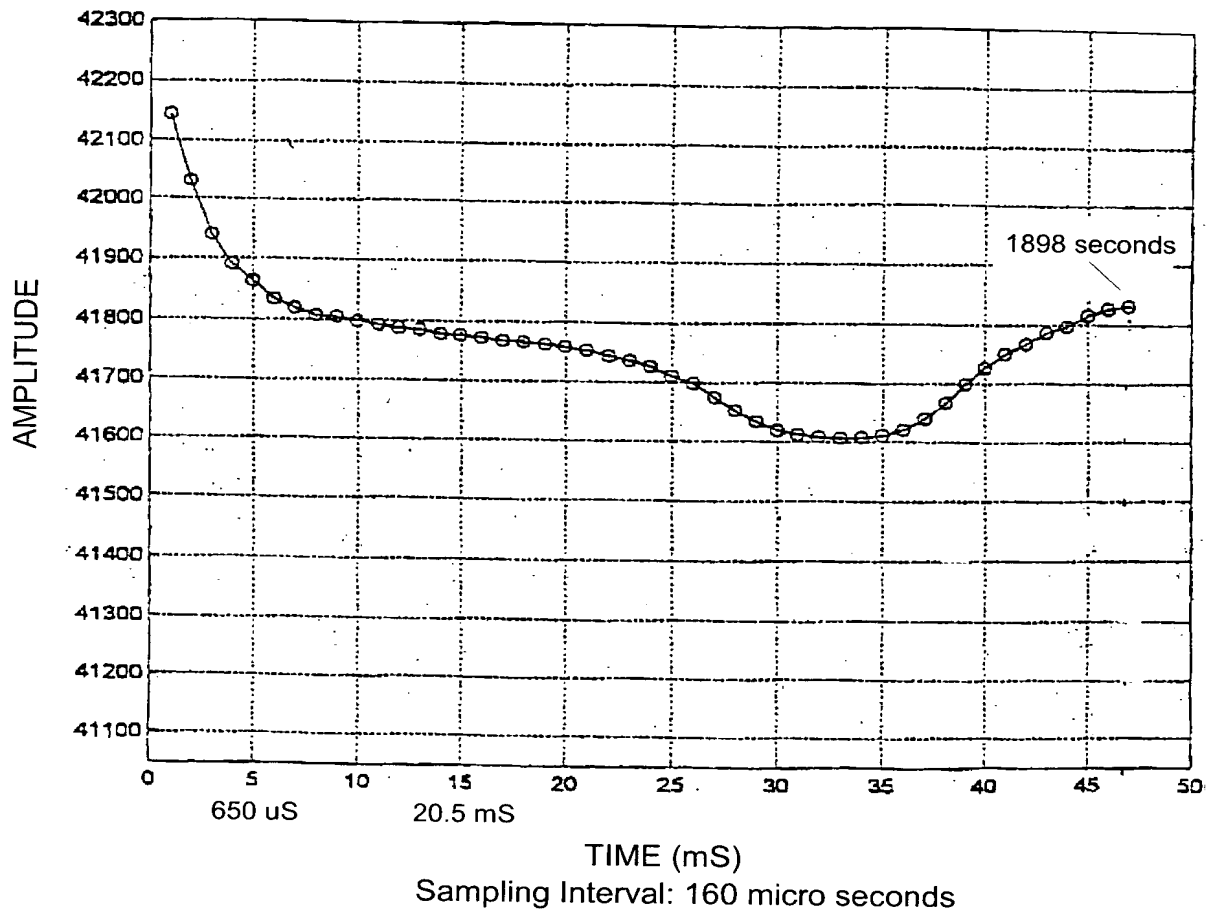
### FIRST DISCHARGE PULSE AND RECOVERY



**FIG. 18F**



**FIG. 18G**



**FIG. 19**

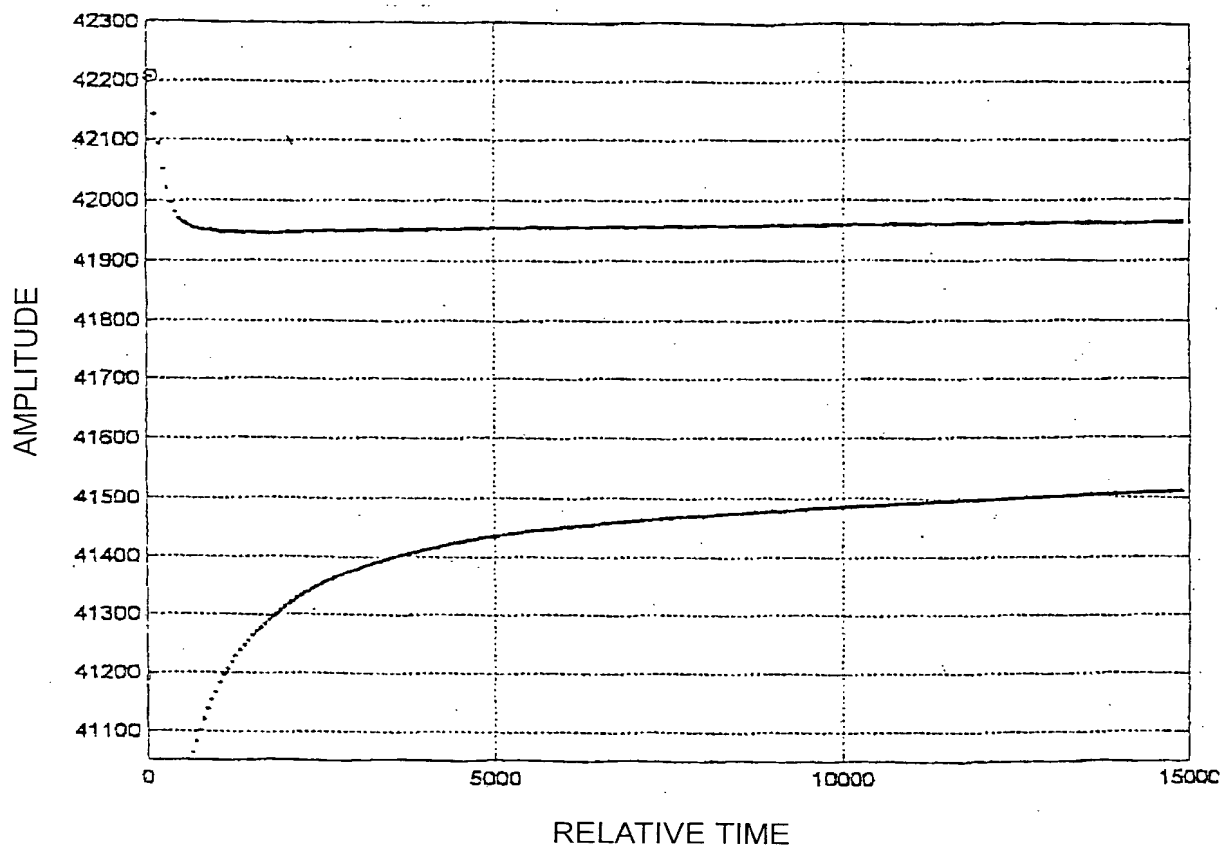


FIG. 20A



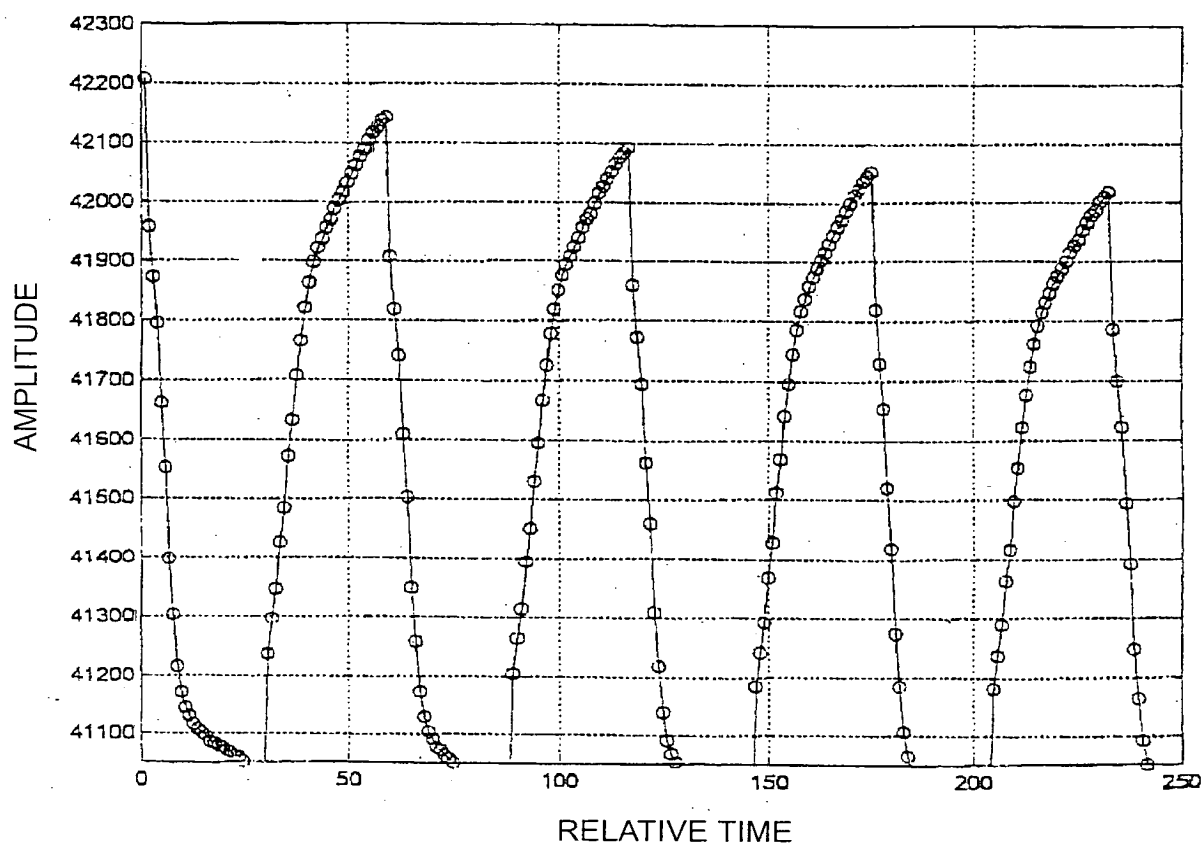


FIG. 20B

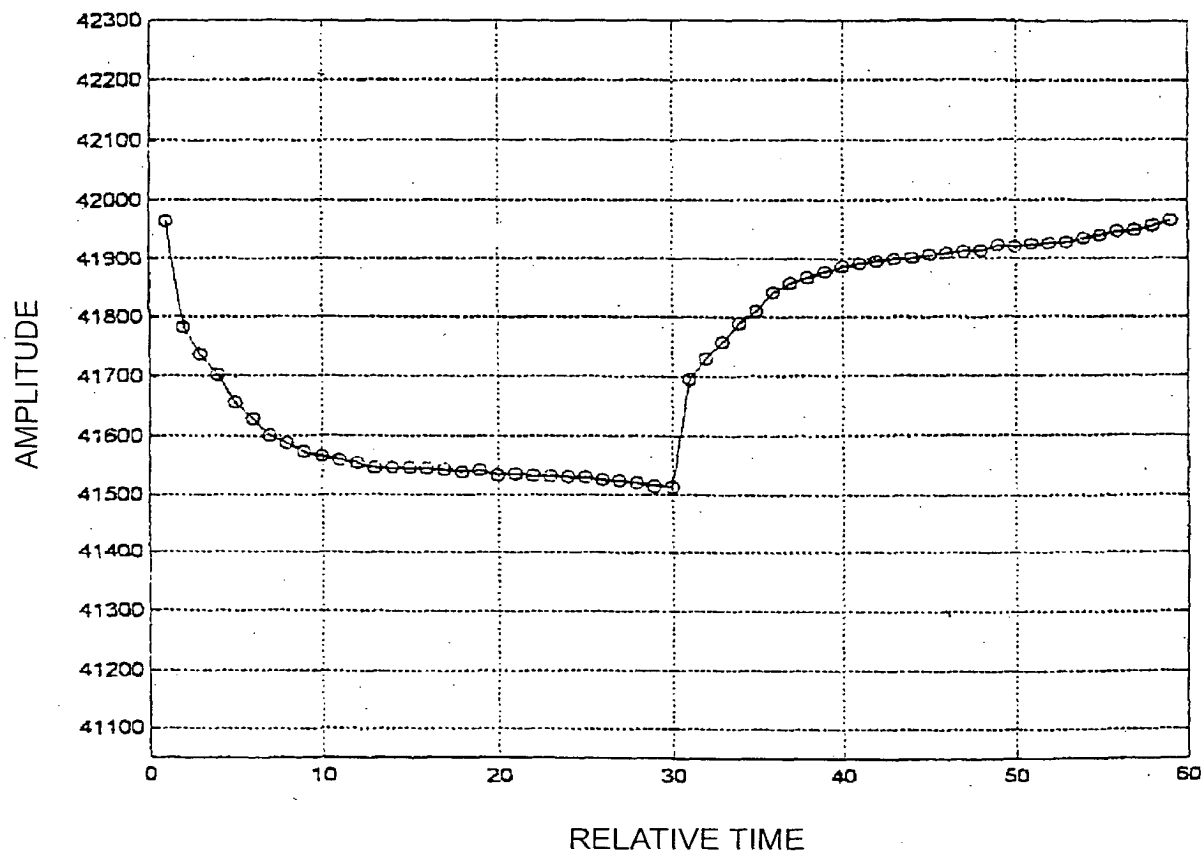
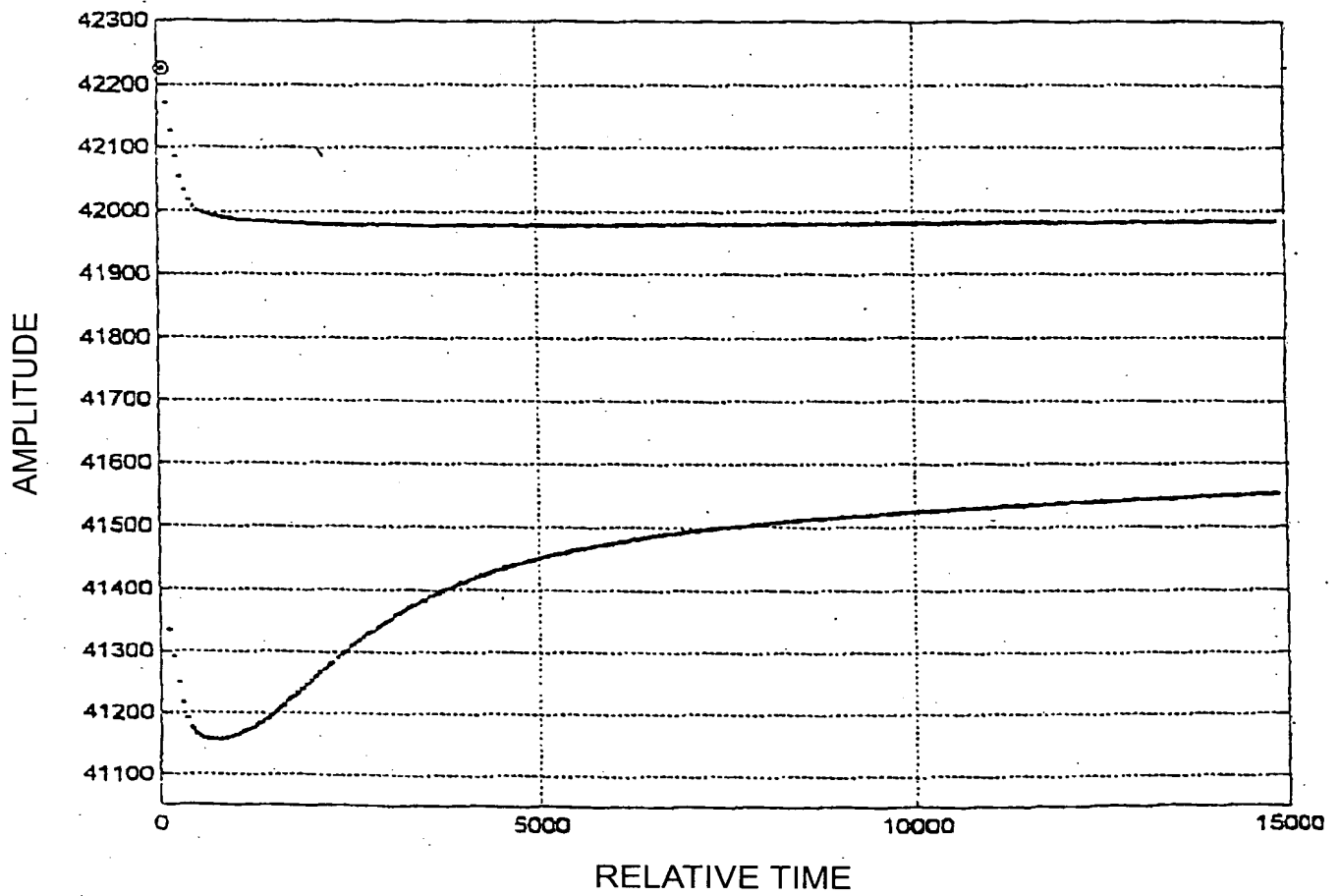


FIG. 20C



**FIG. 21A**

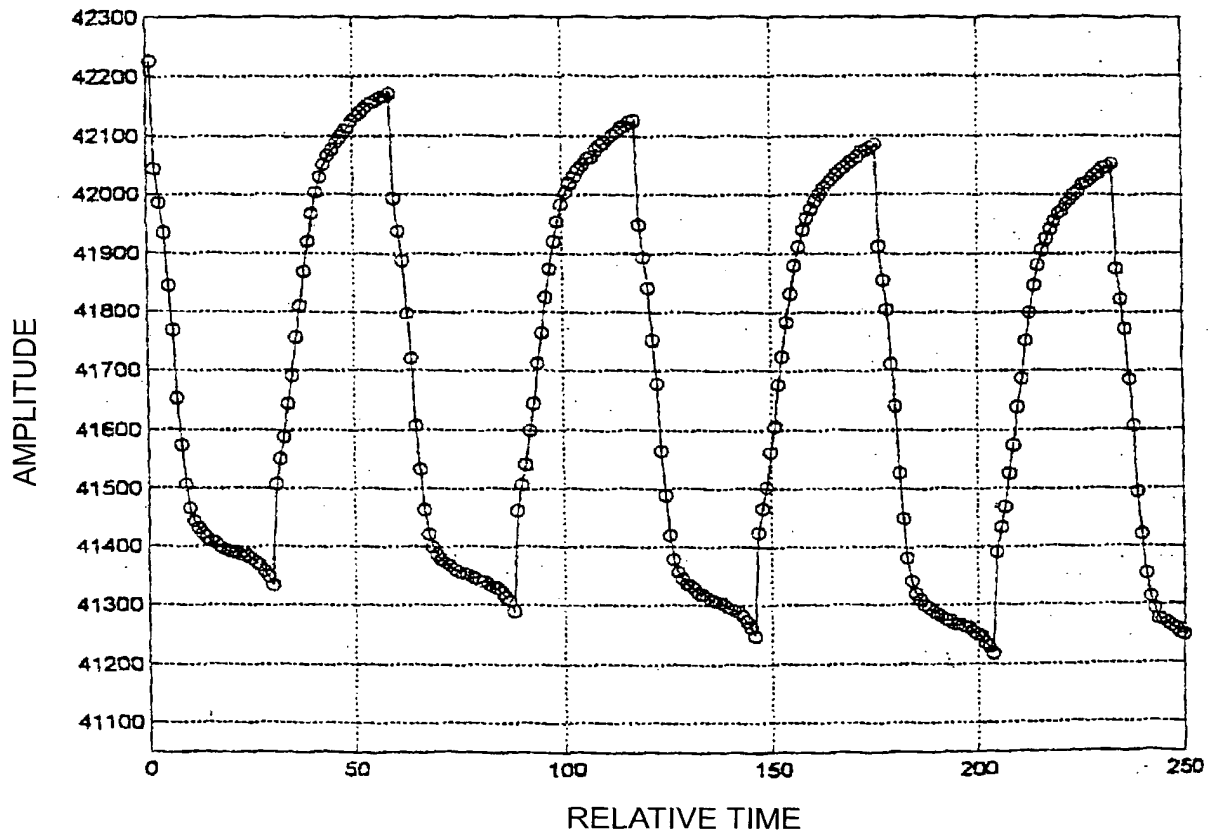


FIG. 21B

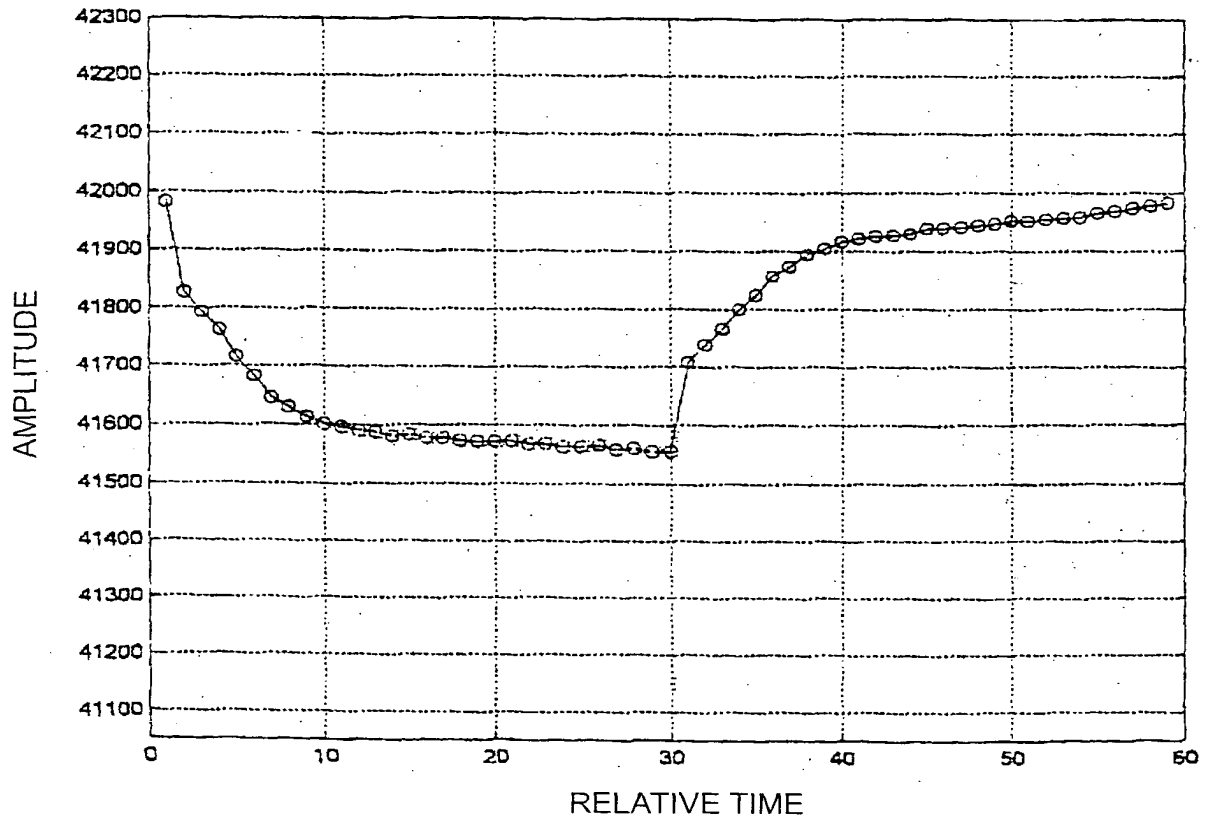


FIG. 21C

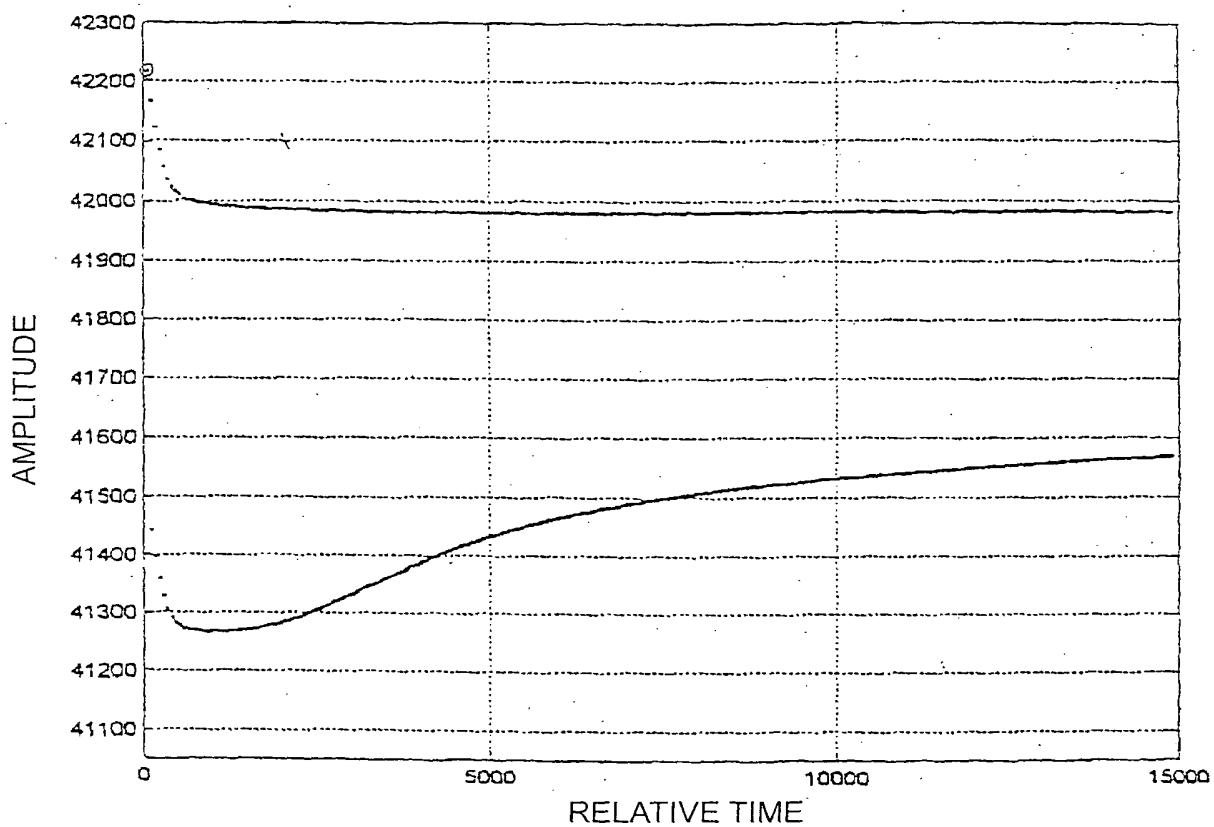


FIG. 22A

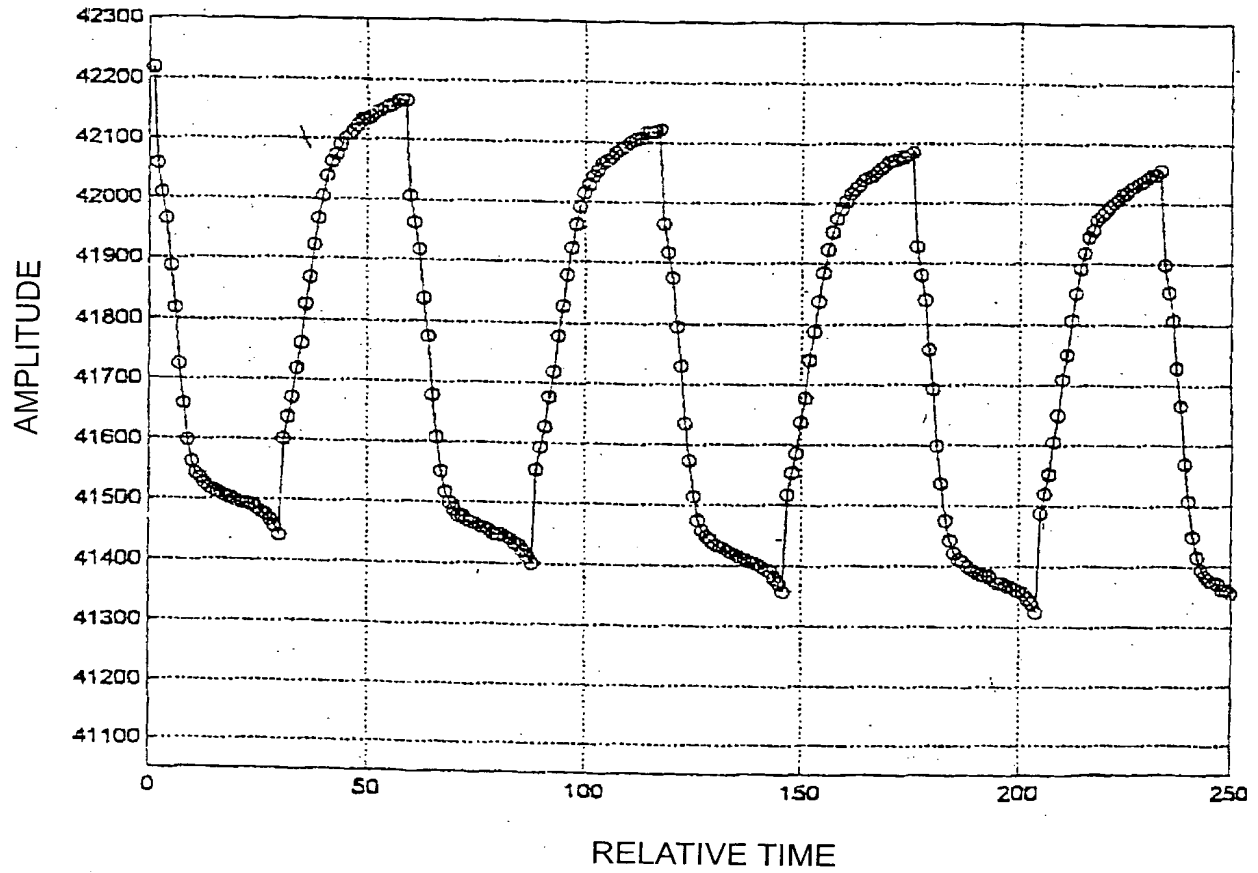
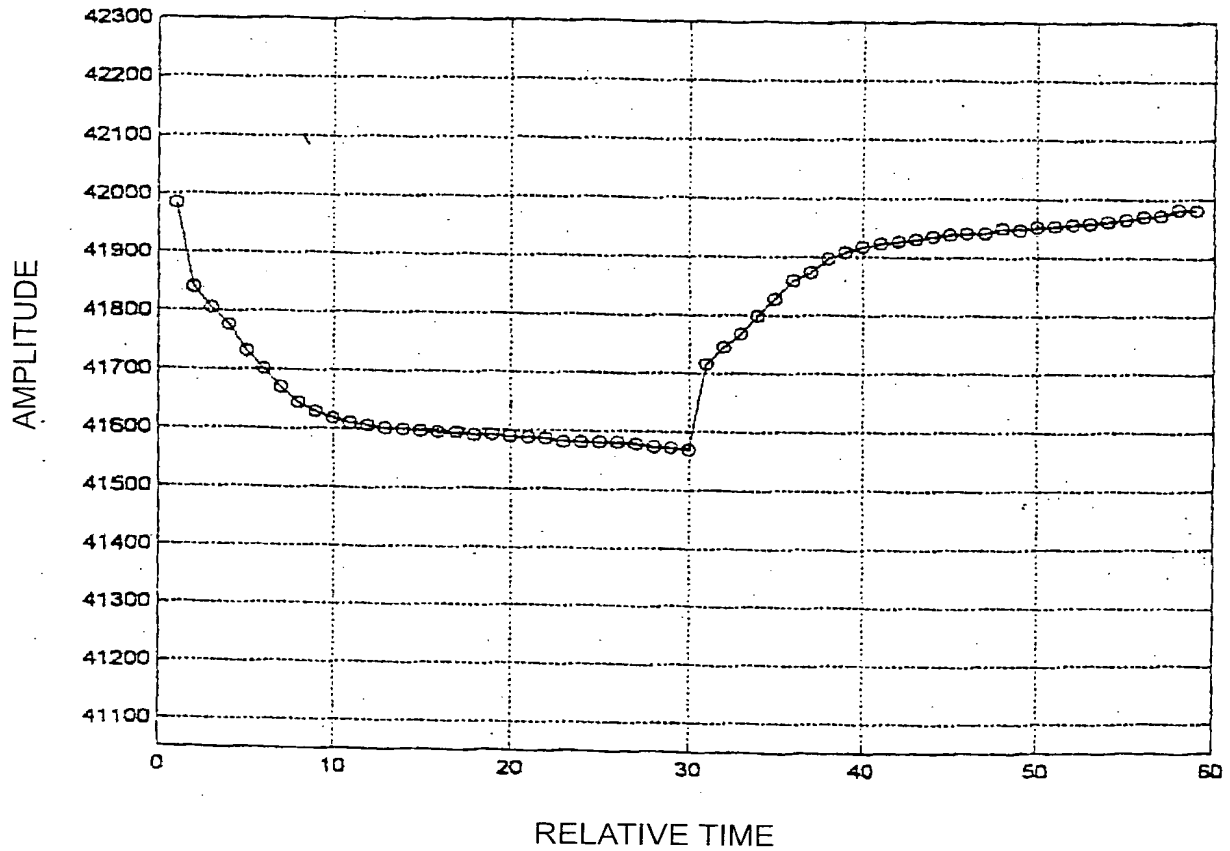
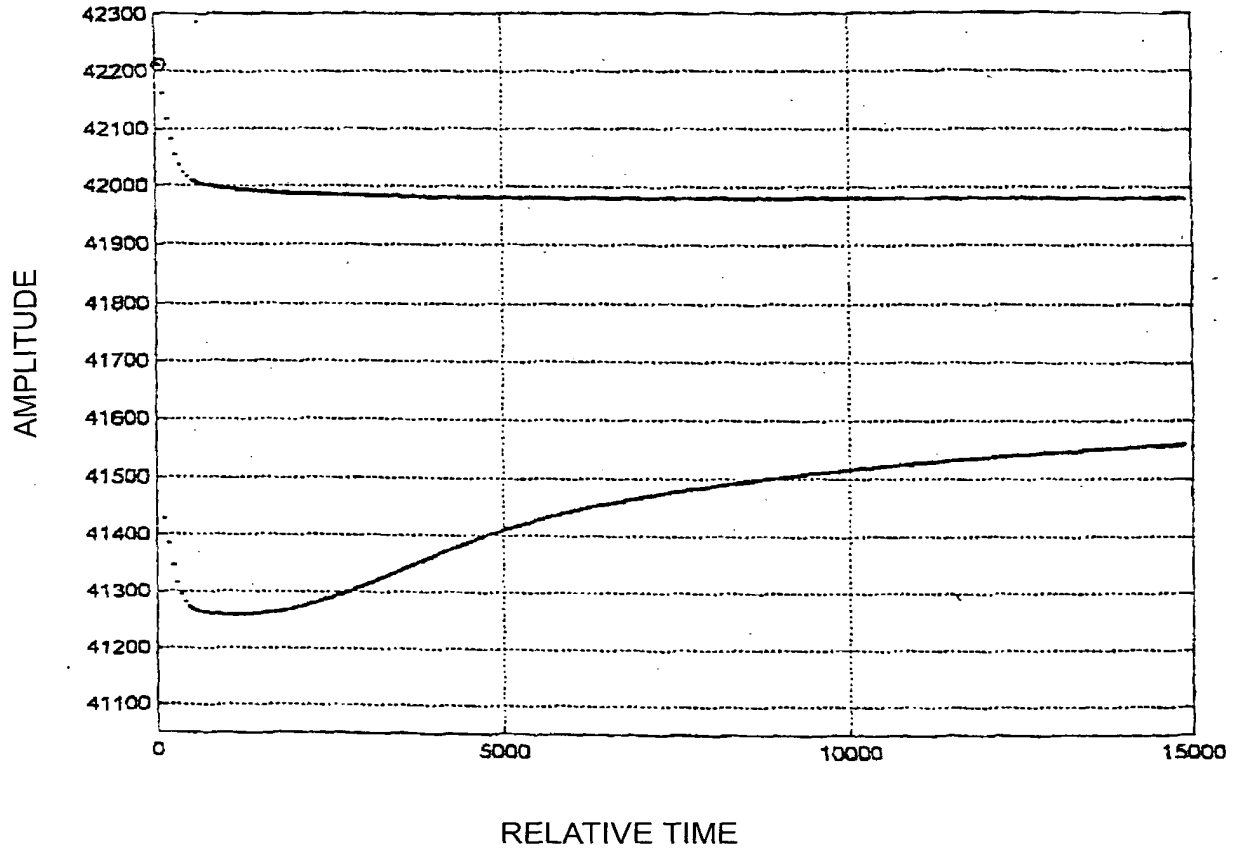


FIG. 22B

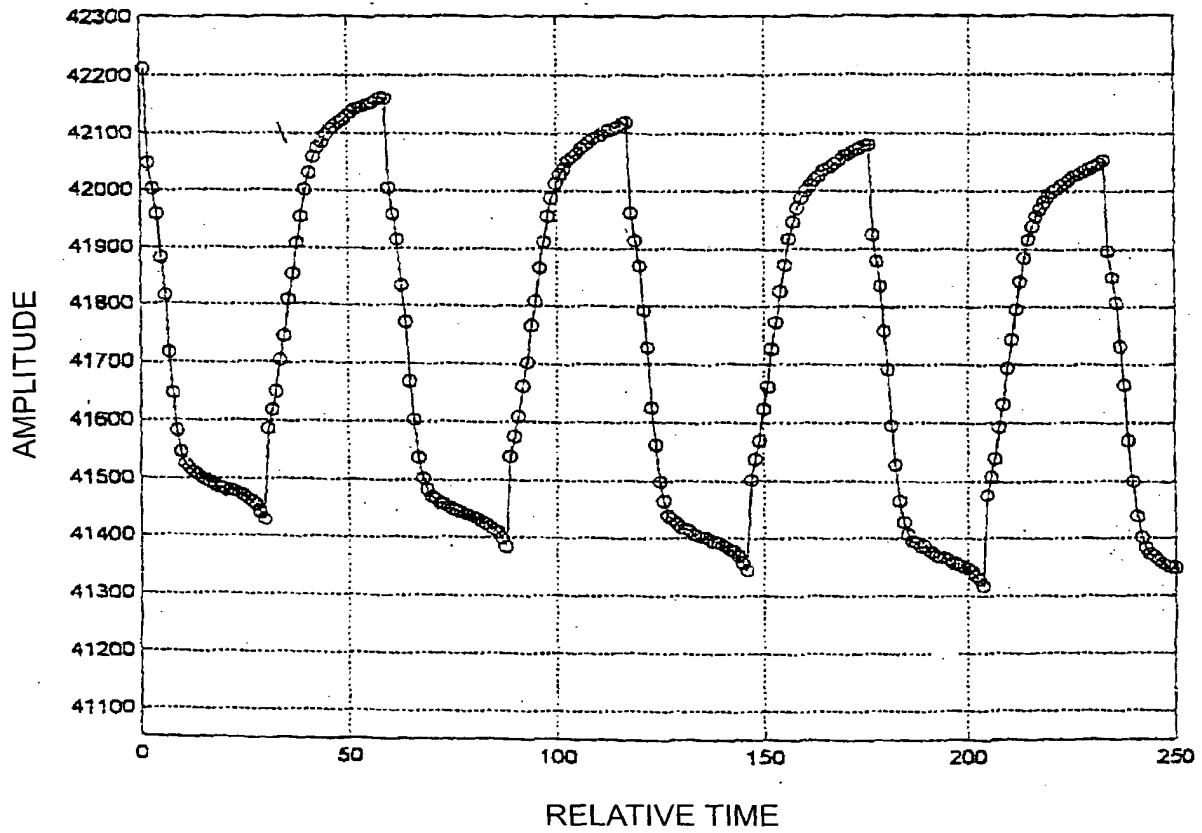


**FIG. 22C**





**FIG. 23A**



**FIG. 23B**

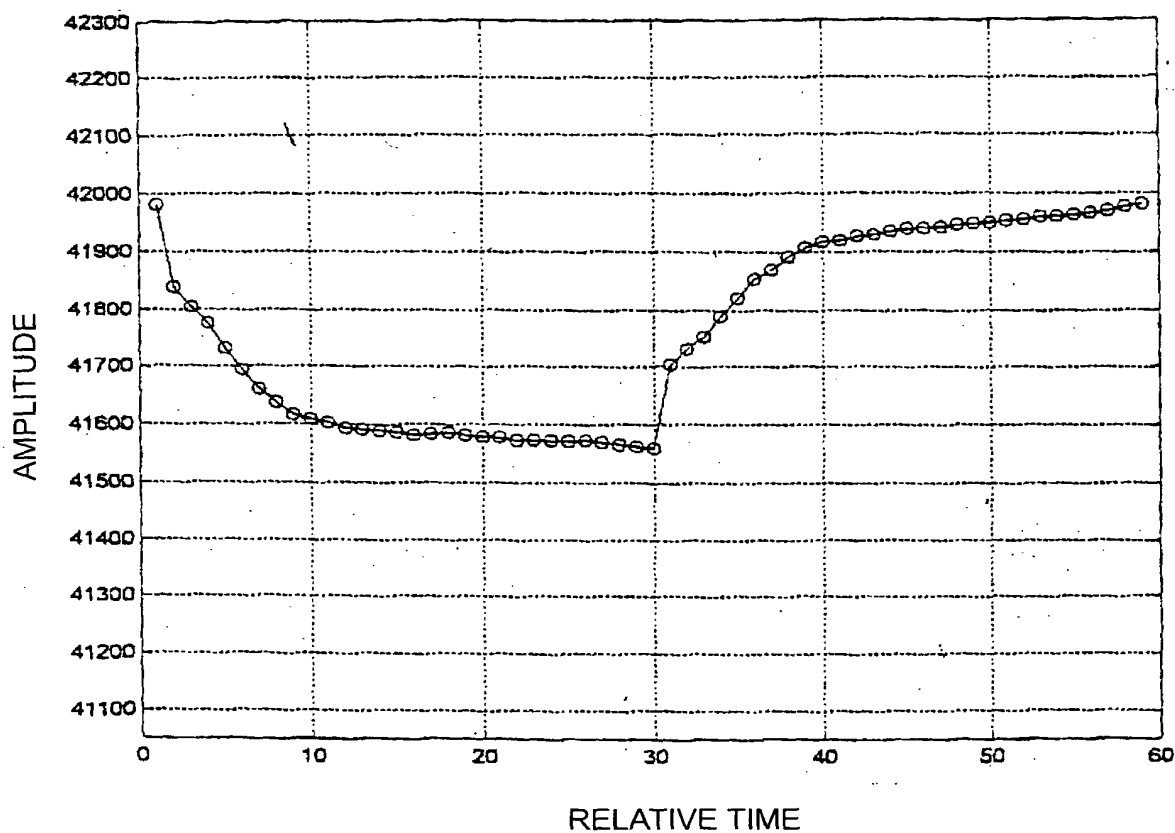
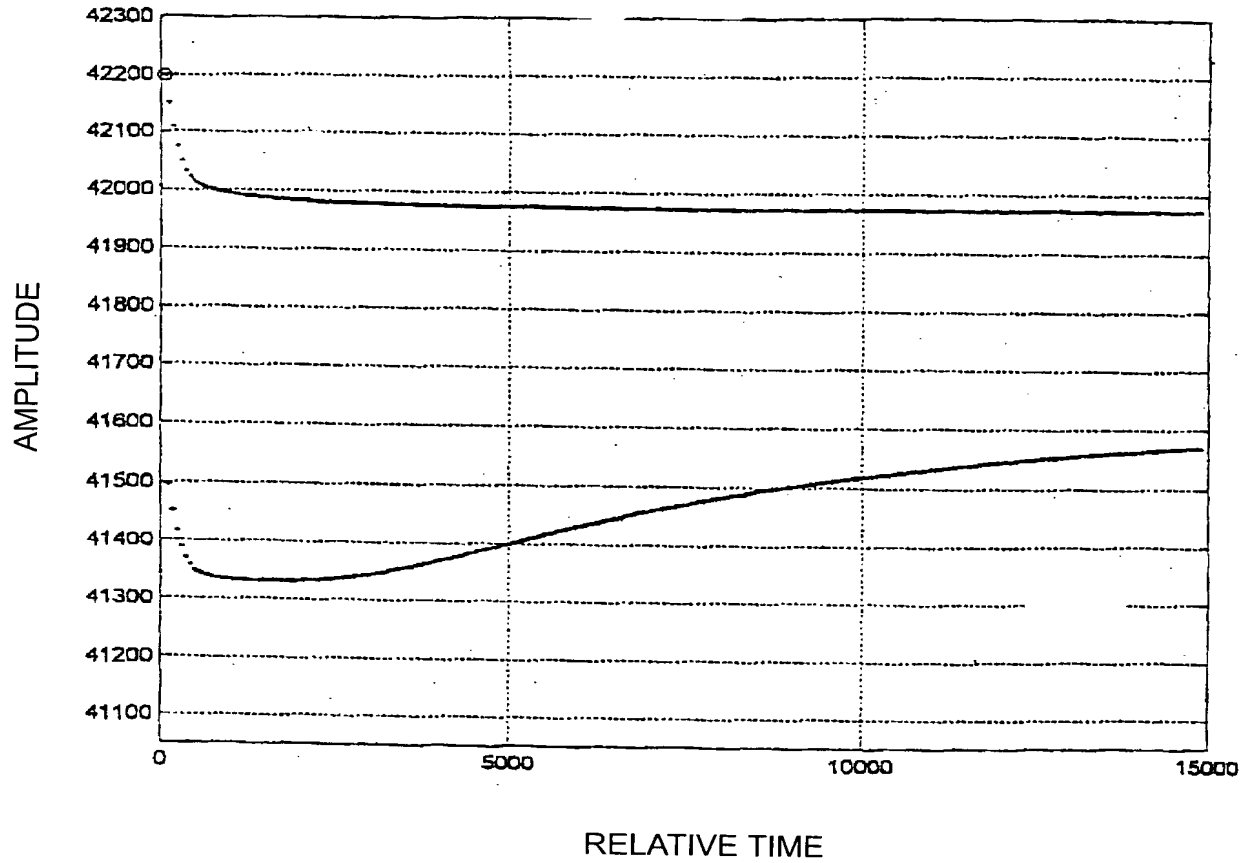
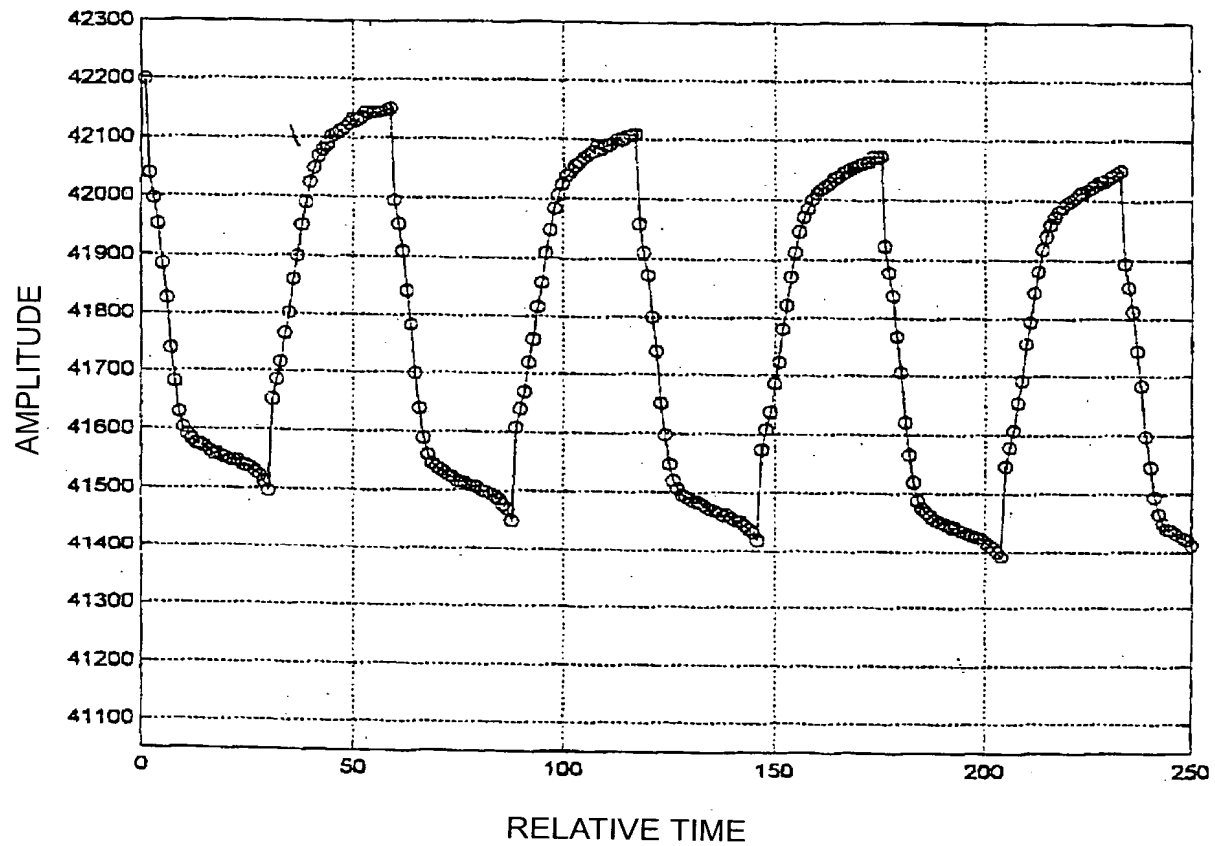


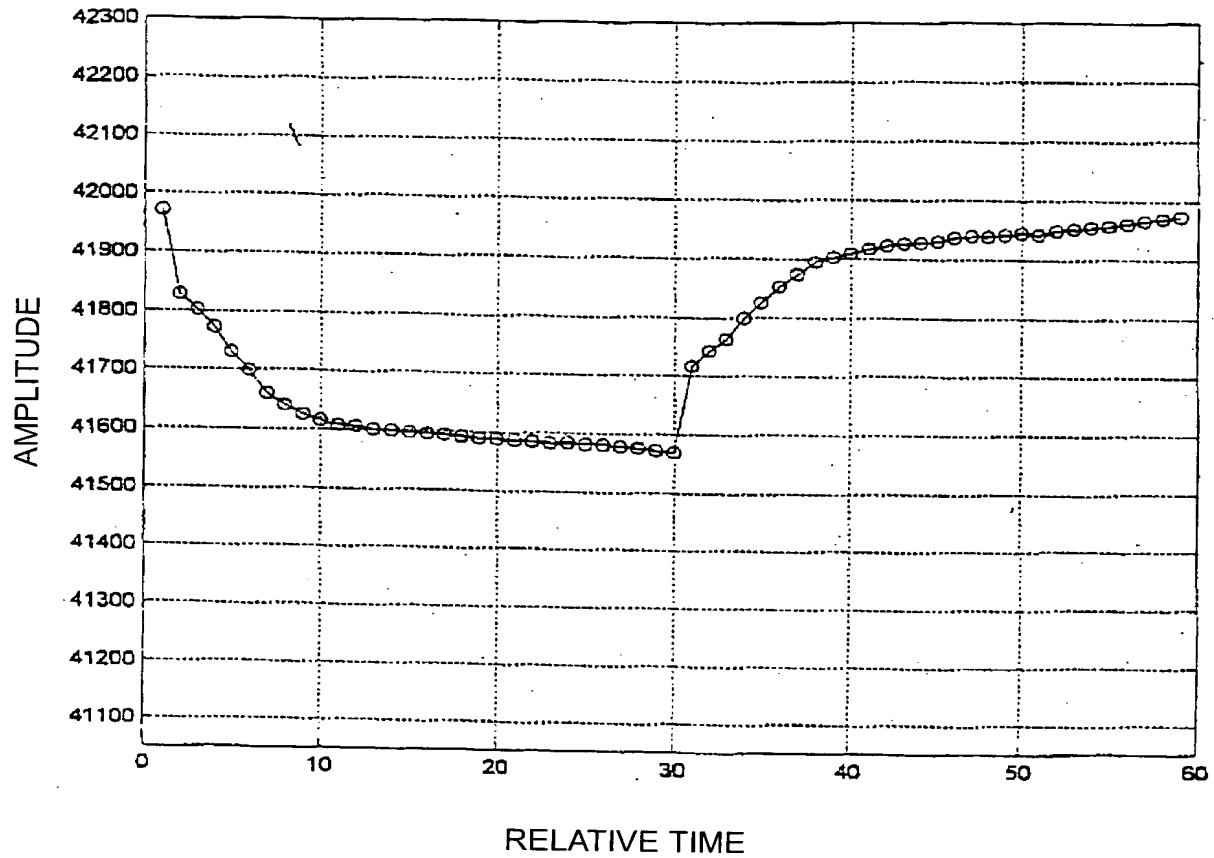
FIG. 23C



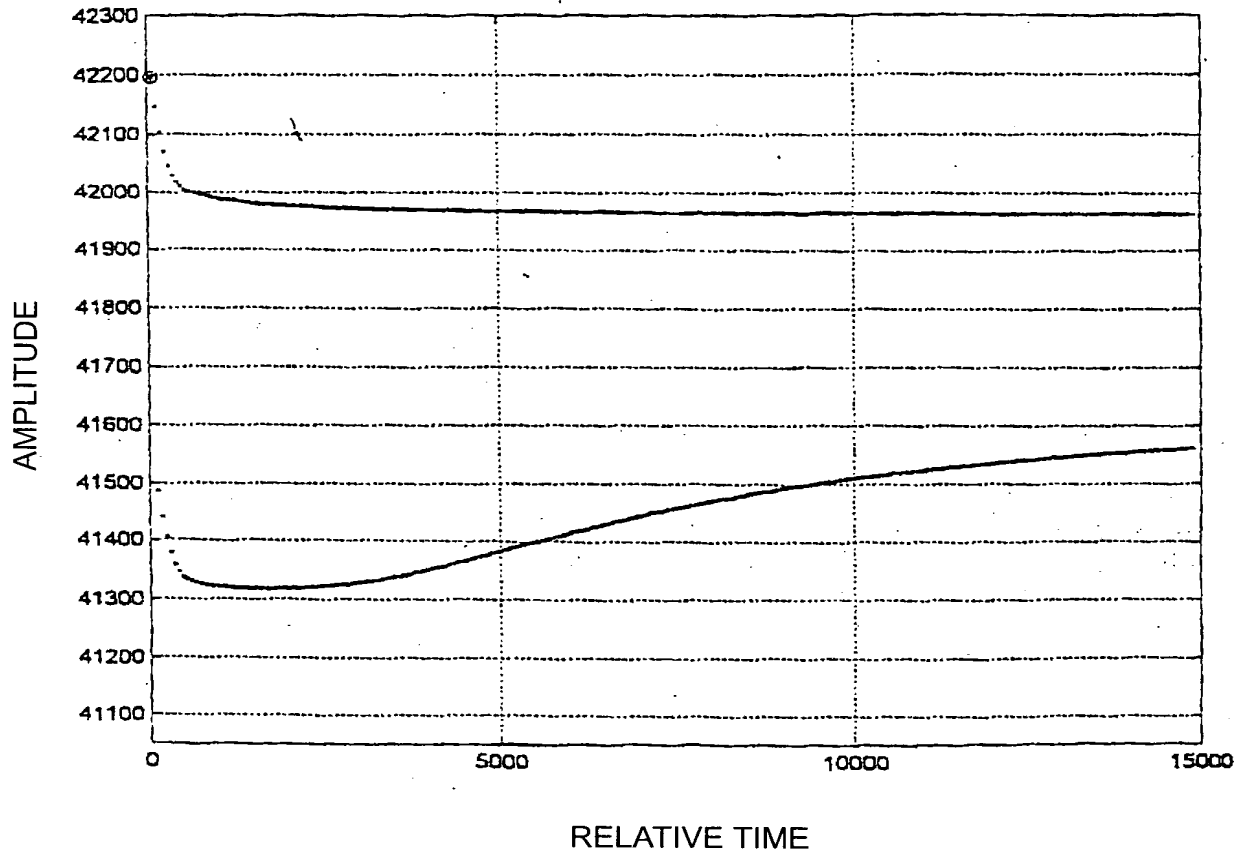
**FIG. 24A**



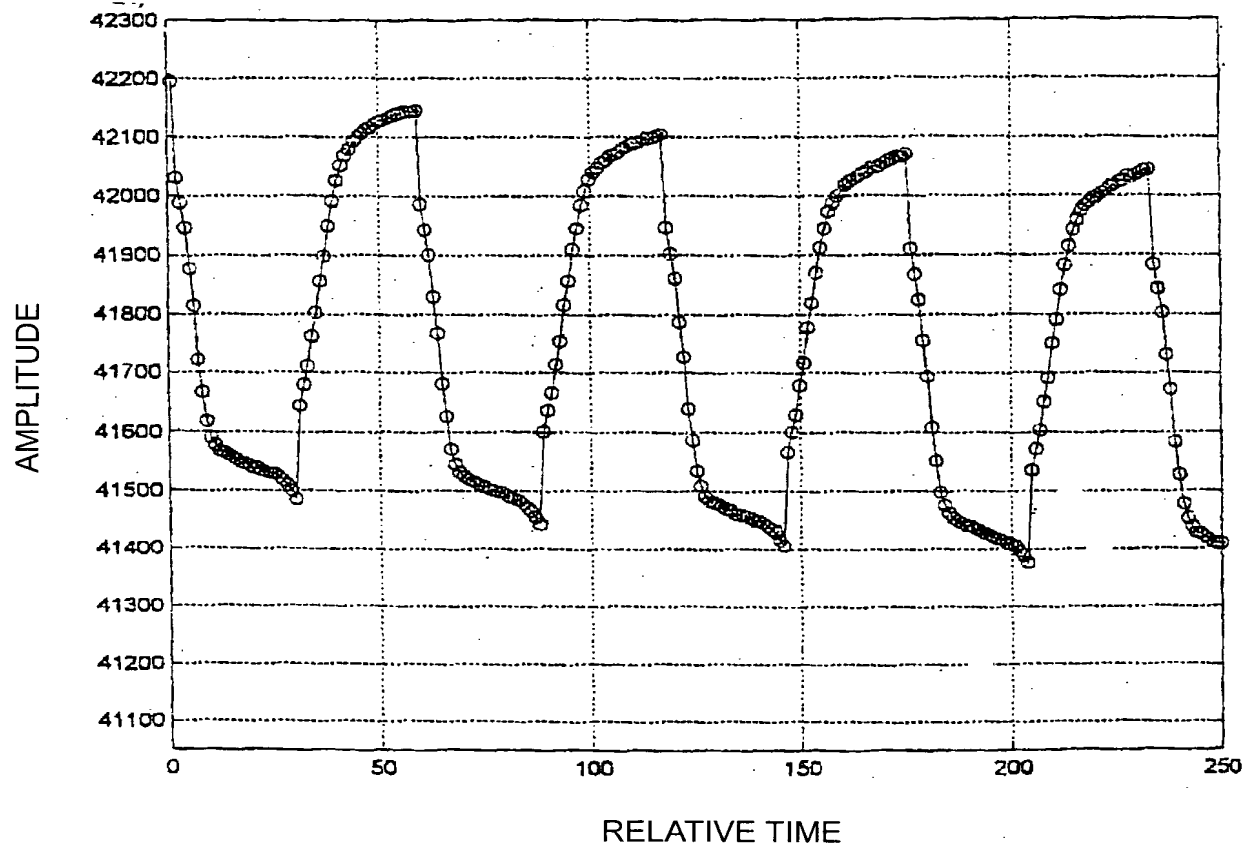
**FIG. 24B**



**FIG. 24C**



**FIG. 25A**



**FIG. 25B**



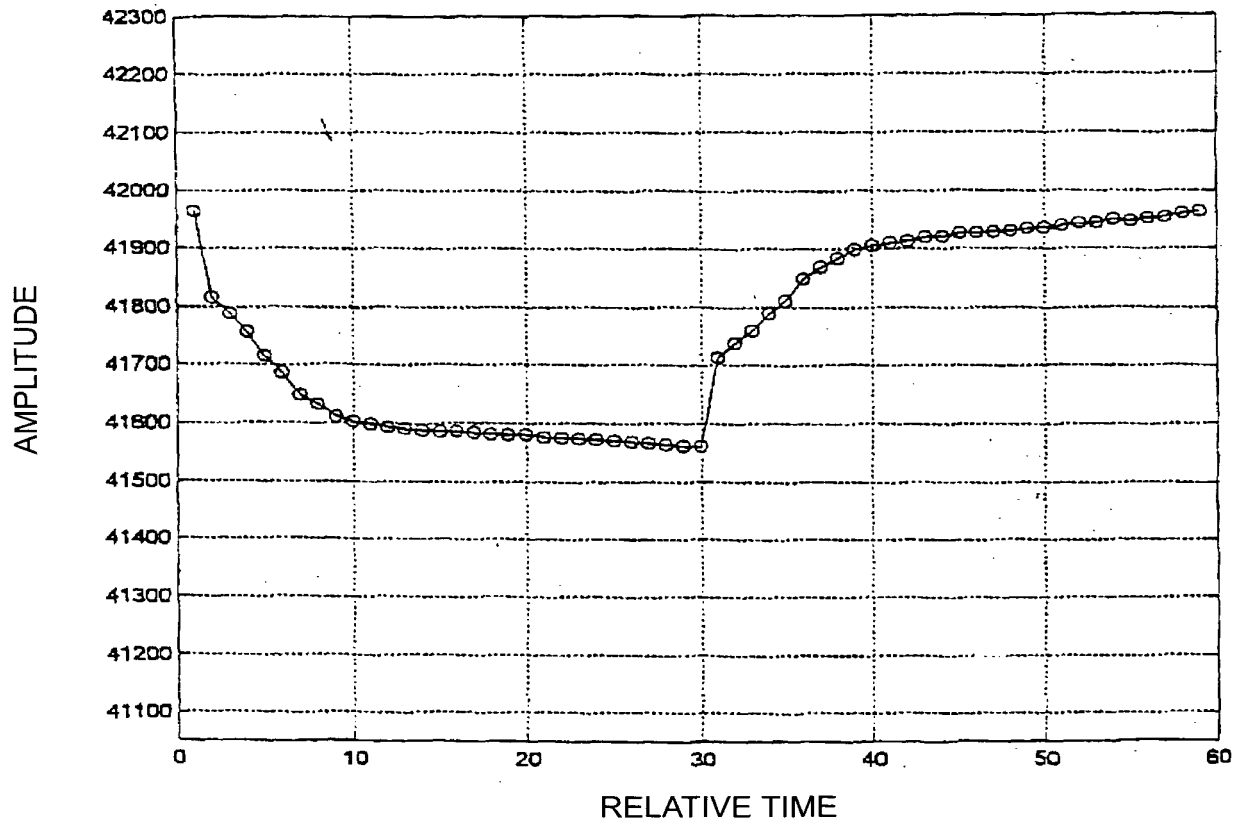
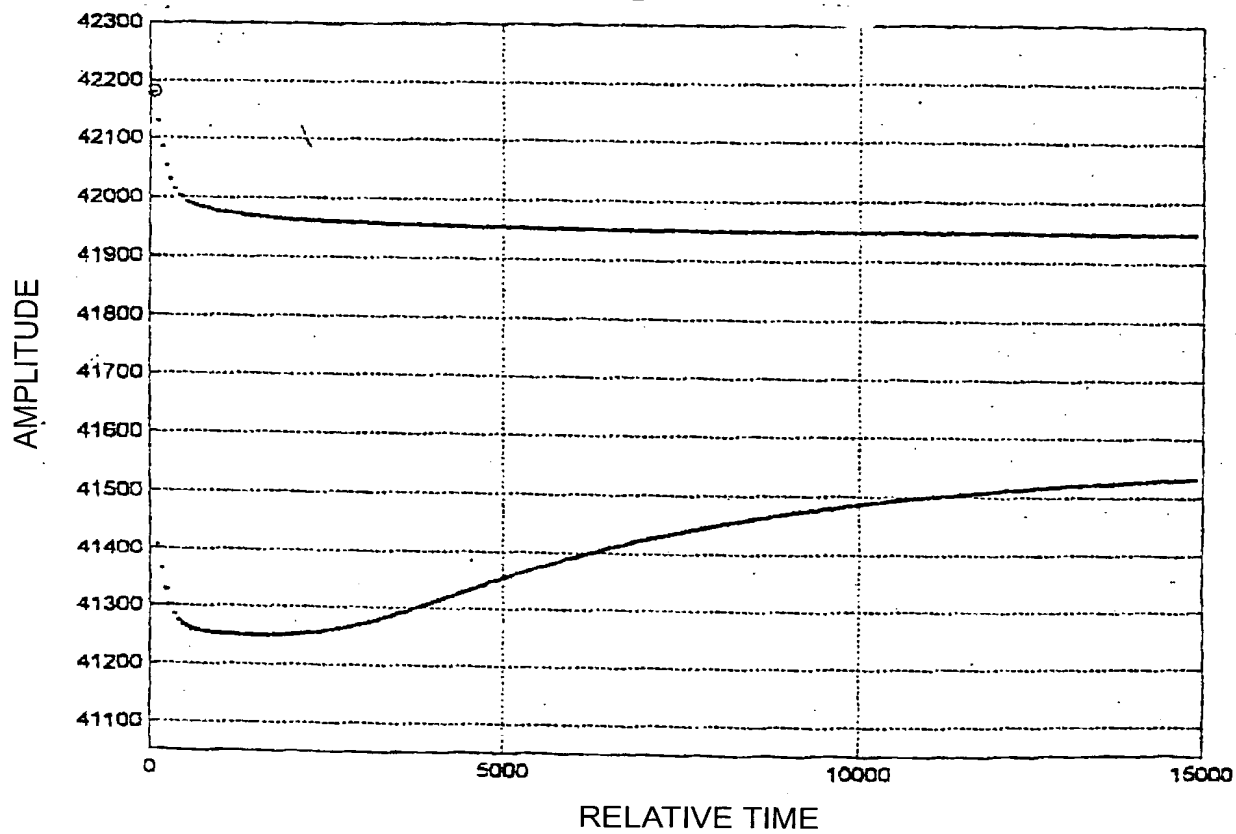
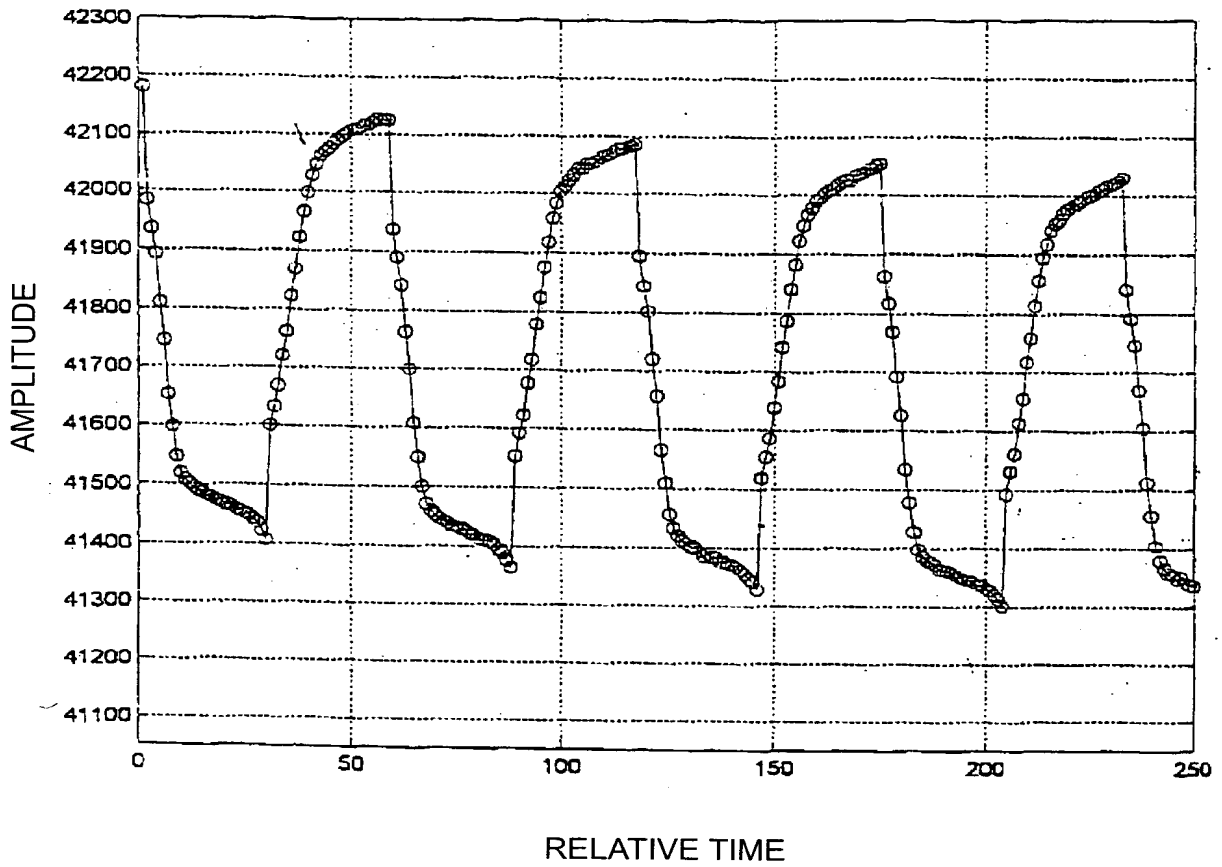


FIG. 25C



**FIG. 26A**



**FIG. 26B**

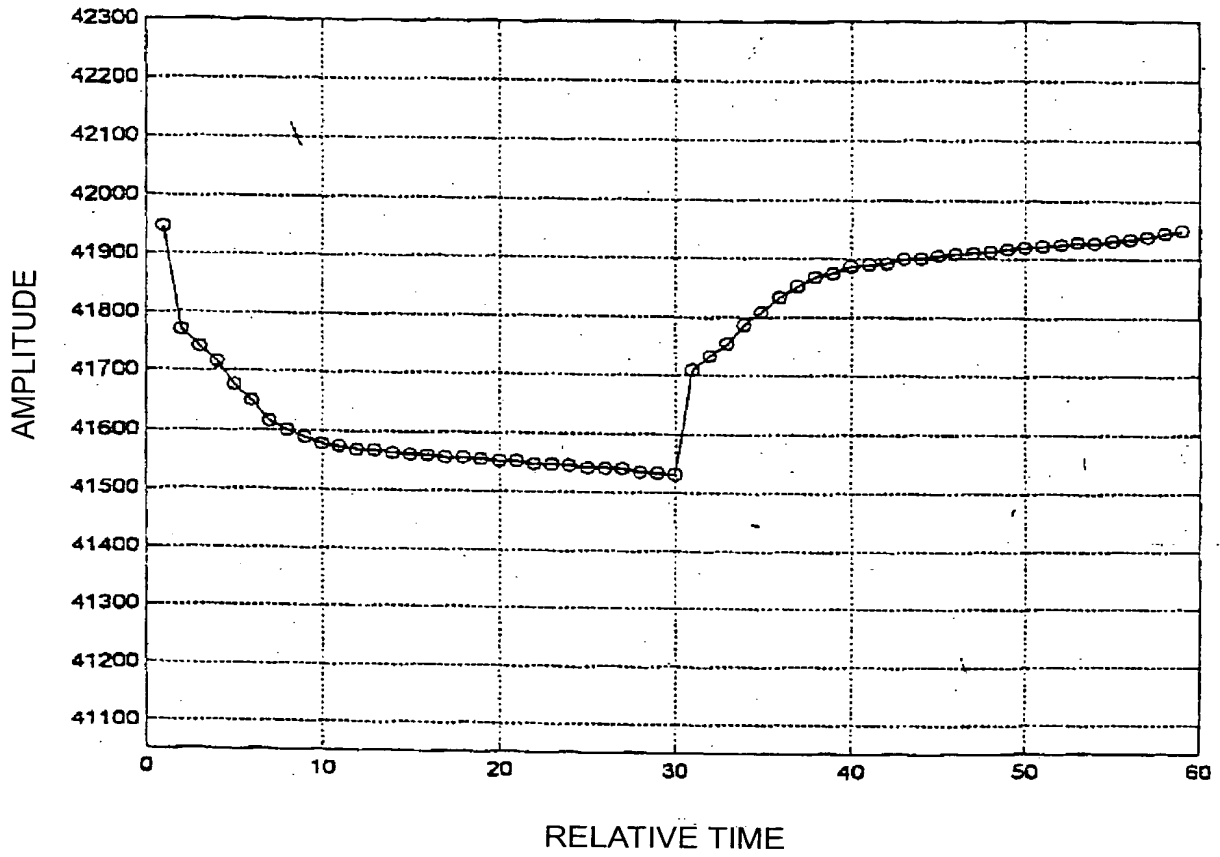
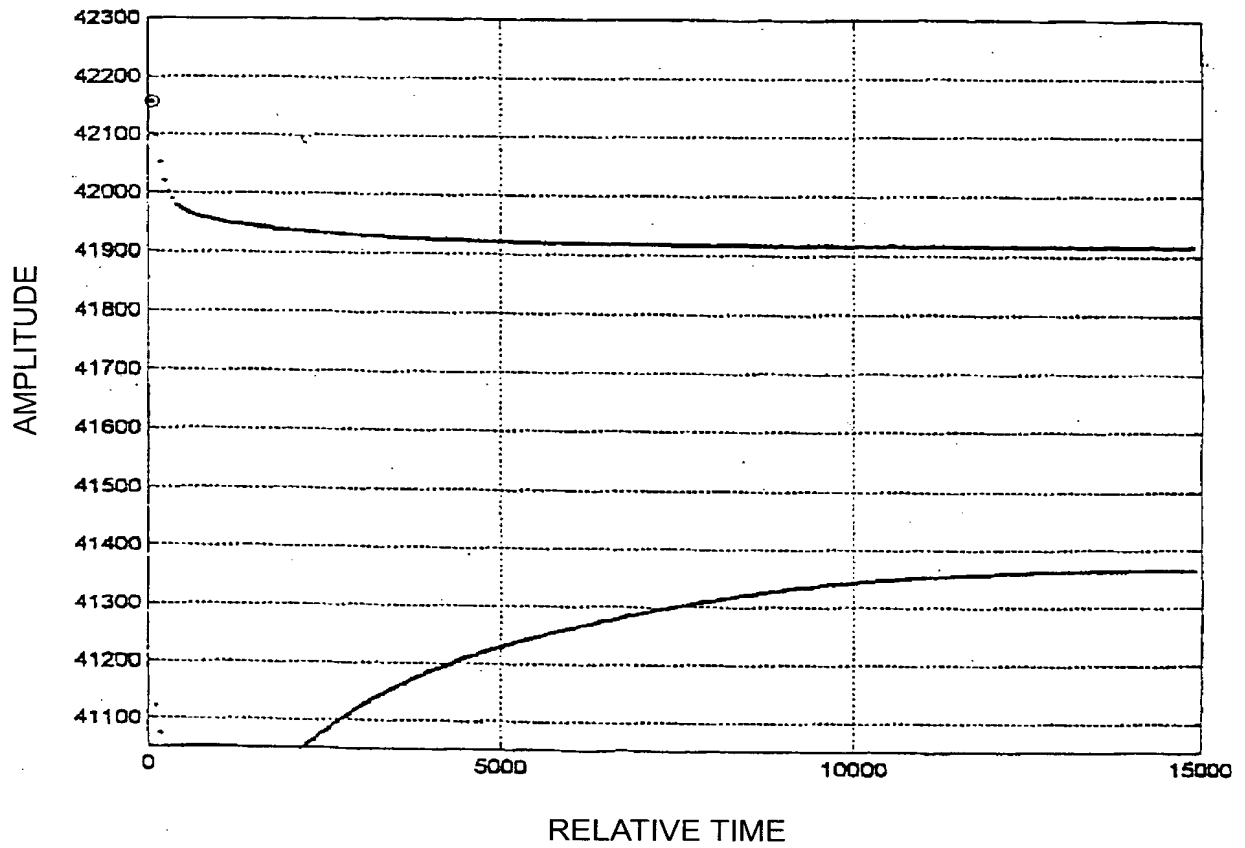
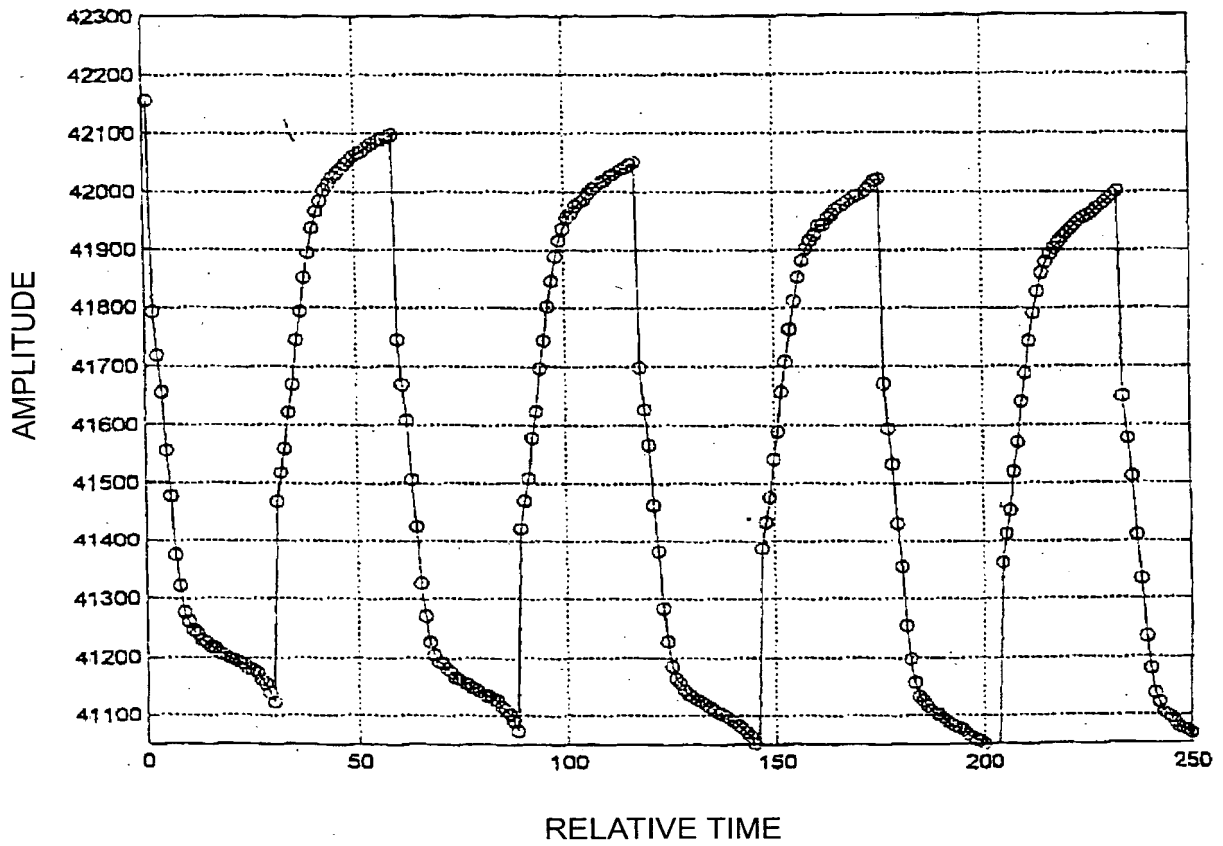


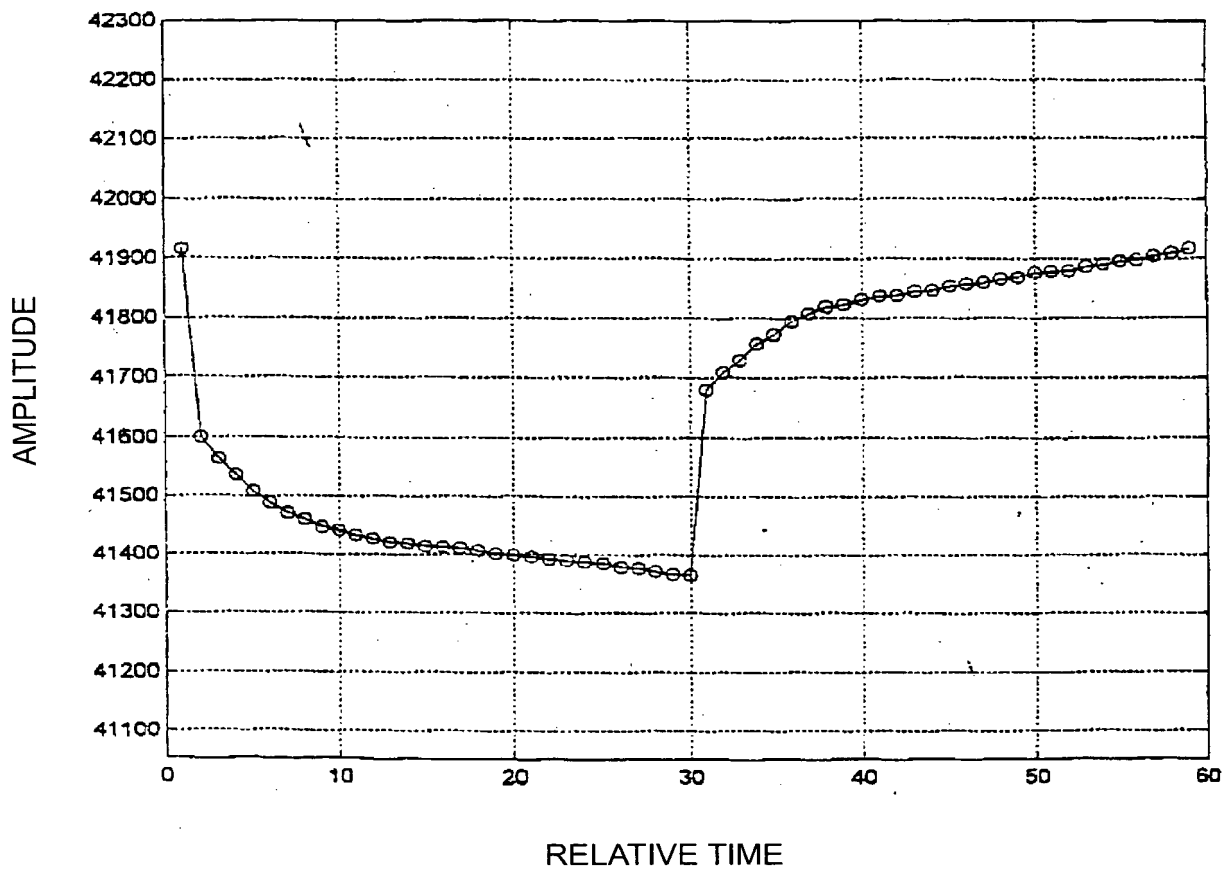
FIG. 26C



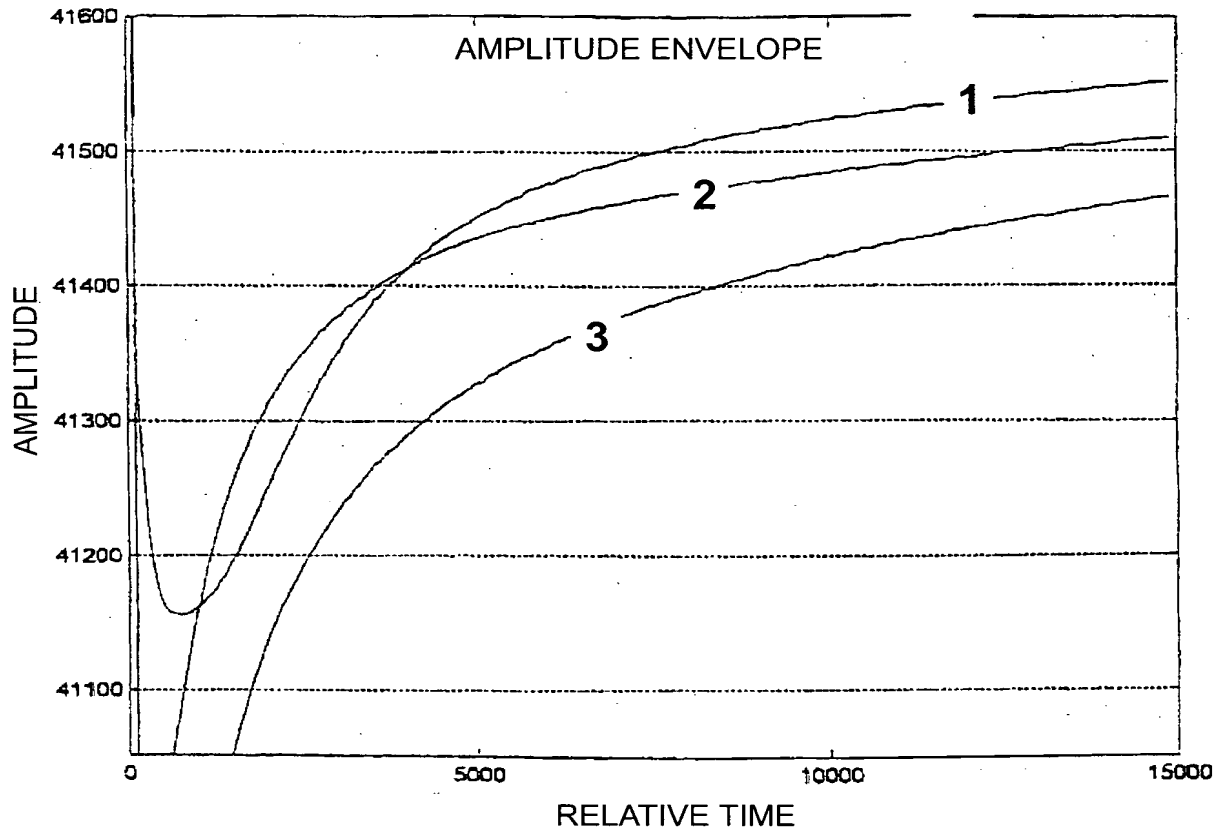
**FIG. 27A**



**FIG. 27B**



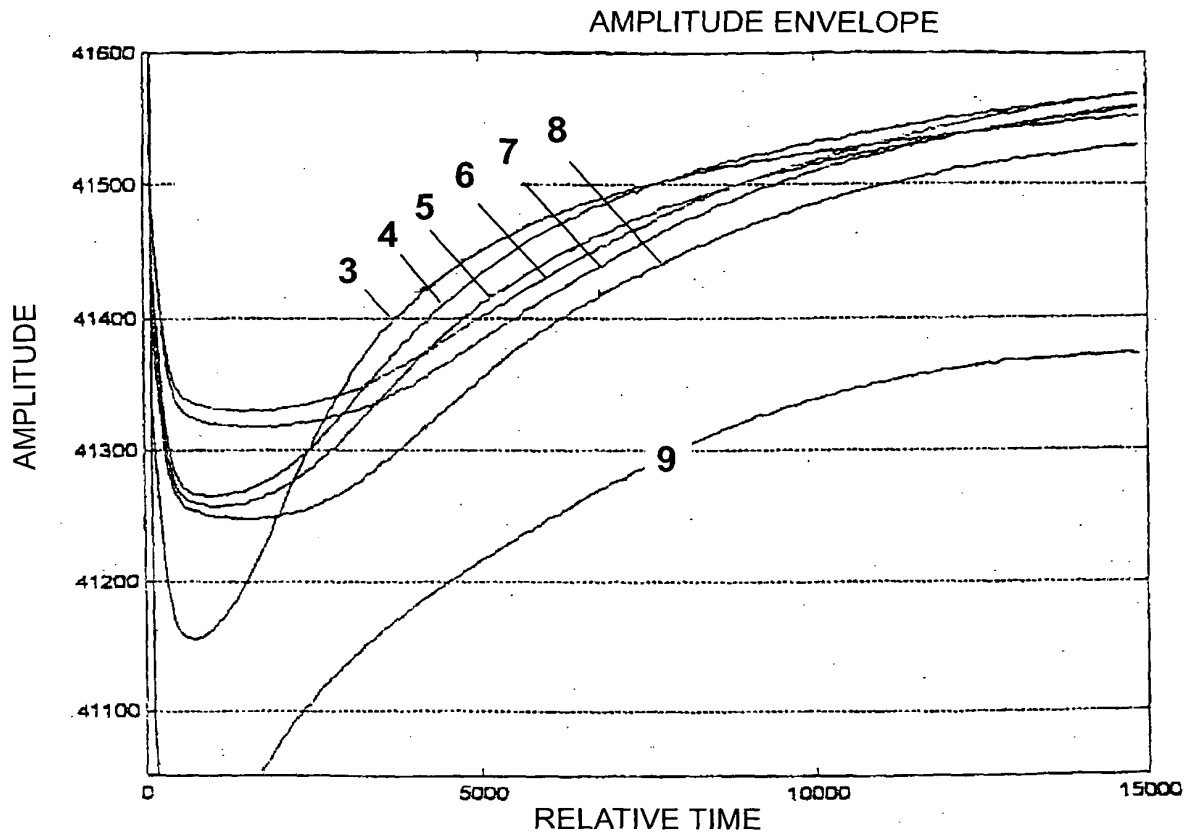
**FIG. 27C**



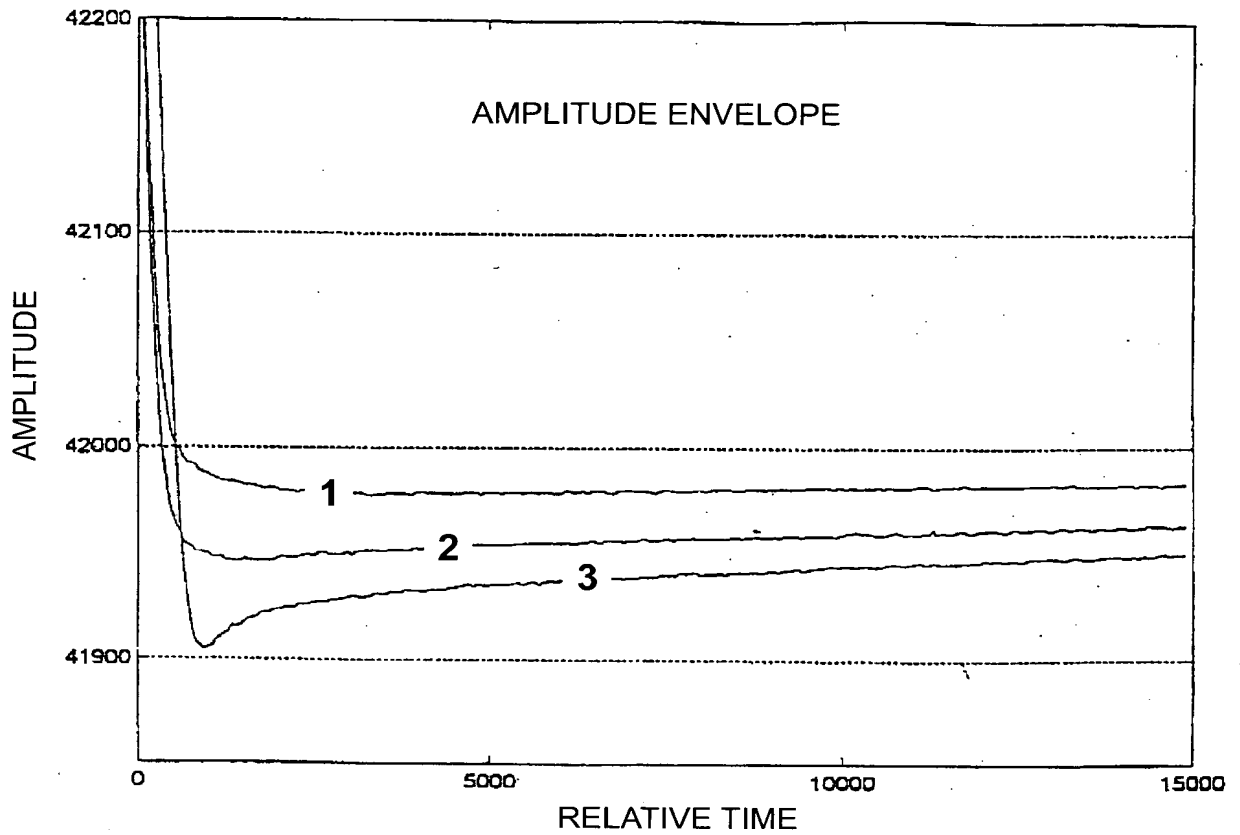
Increasing plot number indicates decreasing state of charge.

**FIG. 28A**



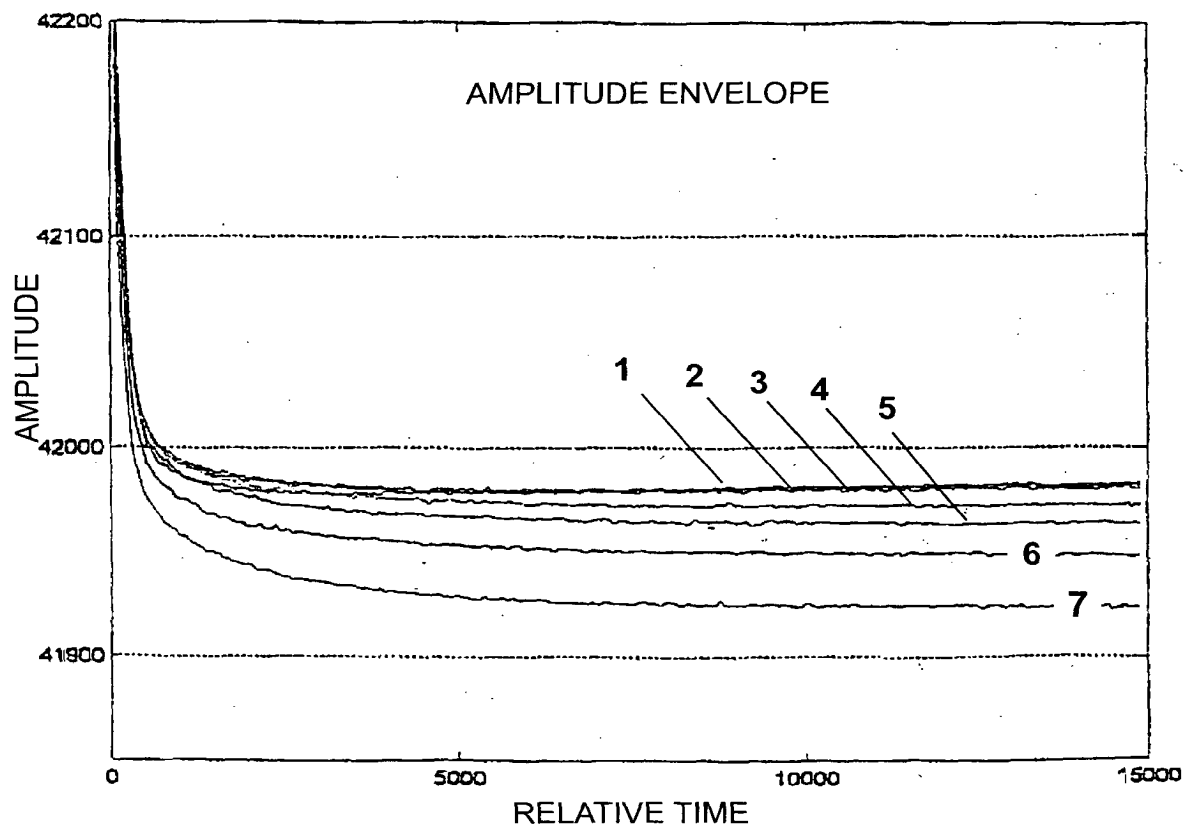


**FIG. 28B**



Increasing plot number indicates decreasing state of charge.

**FIG. 29A**



Increasing plot number indicates decreasing state of charge.

**FIG. 29B**